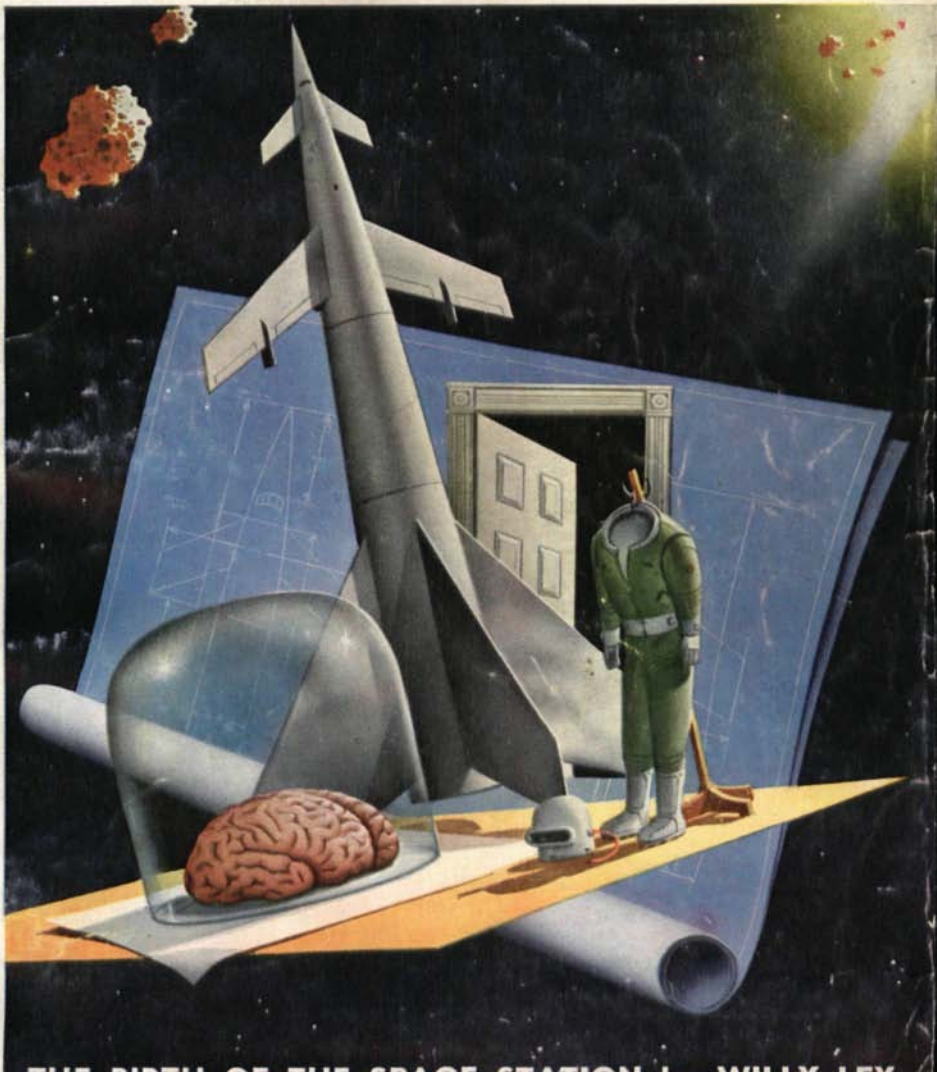
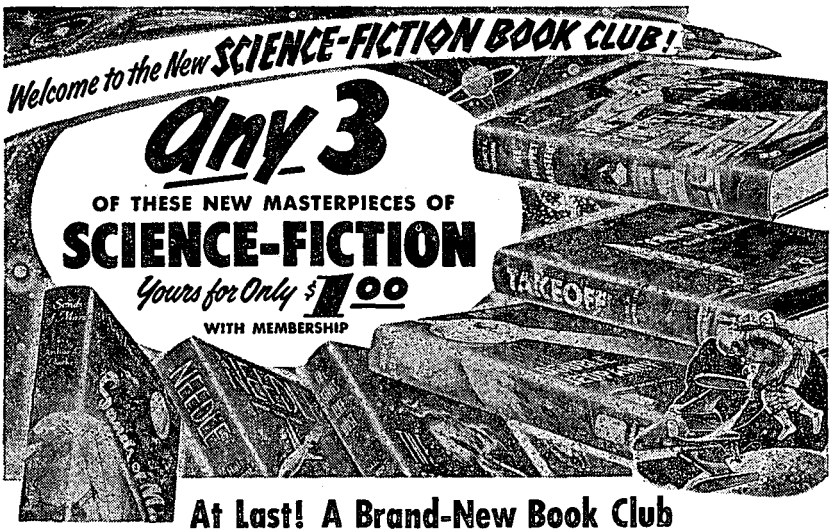
Galaxy
SCIENCE FICTION

APRIL 1953
35¢
ANC



THE BIRTH OF THE SPACE STATION by WILLY LEY

LICENSED TO UNIVERSITY OF
ELECTRONIC REPRODUCTION PROHIBITED



At Last! A Brand-New Book Club Brings You TOMORROW'S Greatest Tales — TODAY!

HERE'S great news for readers who enjoy rocket-swift thrills . . . daring flights of imagination . . . jet-propelled action! It's the brand-new SCIENCE-FICTION BOOK CLUB—organized to bring you the most daring and skillfully-written of these spine-tingling novels *at only a fraction of regular retail price!*

And now to welcome you to the Club you are invited to accept not 1, not 2—but ANY 3 of the books shown here for only $1. Yes — ONLY $1 for ALL THREE! But send no money now —just pick your 3 books and mail coupon on next page AT ONCE.

SANDS OF MARS, *by Arthur C. Clarke* — YOU'RE the first Earth-Man to crash into the Martian desert . . . the first to track down the strange footprints and find yourself face to face with the first—MARTIAN!

NEEDLE, *by Hal Clement.* Both the Hunter and the Hunted were creatures that had to live within another body. So the Hunter entered the body of a student — and the strange chase went on.

DOUBLE JEOPARDY, *by Fletcher Pratt* — Two beautiful women — identical twins but unrelated — PLUS a killer who can kill in TWO places *at the same time!*

THE STARS LIKE DUST, *by Isaac Asimov*—Why did "they" plant a deadly radiation bomb in the room of the young University of Earth student? And what could the lone boy do to prevent the planet-by-planet conquest of the entire Galaxy?

TAKEOFF, *by C. M. Kornbluth.* Rocket fans start building a ship for the first trip to the moon. Clues suggest that construction is being paid for by *a foreign power.*

THE PUPPET MASTERS, *by Robert A. Heinlein.* A flying saucer lands in Iowa. From it ooze parasitic slugs that enter men's bodies and turn them into puppets!

—Continued on Next Page

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Yes! Any 3 of these Top Science-Fiction Thrillers Yours for Only $1.00

—Continued from Opposite Page

IMAGINE — ANY THREE of these full-size, brand-new SCIENCE-FICTION books — yours for only $1.00! Each one is crammed with science thrills of the future . . . packed with the imagination that will make tomorrow's headlines . . . written by the most sought-after science-fiction writers of today. A $7.50 to $9.00 value, complete and in handsome permanent bindings — but yours for only $1.00 on this amazing offer!

The founding of this SCIENCE-FICTION BOOK CLUB is a recognition of the fact that Science-Fiction has won a place as an important *new kind* of literature — that it is a valuable addition to the library of every imaginative reader. Science-fiction has grown so fast it's hard to keep up with it! How is one to read the BEST new Science-Fiction books—without wasting time and money wading through good and bad alike?

Now — The Cream of New Science-Fiction Books — For Only $1 Each!

The SCIENCE-FICTION BOOK CLUB selects each month the best—*and only the best new* Science-Fiction book. And to enable you to ENJOY the finest without worrying about the cost, the Club has arranged to bring you the brand-new full-length books *FOR ONLY $1 EACH* (plus a few cents shipping charge) — even though they cost $2.50, $2.75 and up in publishers' editions!

NO Dues or Complicated Rules

The operation of the Club is simple. Each month the Board of Editors reads all the promising new science-fiction books and selects the No. 1 title. Each selection is described well IN ADVANCE, in the Club's interesting free bulletin, "Things to Come." You take ONLY those books you really want —as few as four a year, if you wish. If you don't want the current selection, you simply notify the Club. It's that simple. There are no other rules, no dues, no fees.

Send No Money—Just Mail Coupon

We KNOW that you will enjoy membership in this unusual new book club. To PROVE it, we are making this amazing offer to new members! Your choice of ANY 3 of the new Science-Fiction masterpieces — AT ONLY $1 FOR ALL THREE. Two are your *gift books for joining; the other is your first* selection. This liberal offer may have to be withdrawn at any time. So mail coupon RIGHT NOW to: **SCIENCE-FICTION BOOK CLUB, Dept. GSF-4, Garden City, New York.**

WHICH 3 DO YOU WANT FOR ONLY $1.00?

SCIENCE-FICTION BOOK CLUB
Dept. GSF-4, Garden City, New York

Please rush me the 3 books I have checked, below, as my gift books and first selection. You will bill me only $1 for all three (plus few cents shipping charge), and enroll me as a member of the Science-Fiction Book Club. Every month send me the Club's free bulletin, "Things to Come," so that I may decide whether or not I wish to receive the coming monthly selection described therein. For each book I accept, I will pay only $1 plus a few cents shipping charge. I do not have to take a book every month (only four during each year I am a member)—and I may resign at any time after accepting four selections.

SPECIAL NO RISK GUARANTEE: If not delighted, I may return all books in 7 days, pay nothing, and this membership will be cancelled!

☐ DOUBLE JEOPARDY ☐ PUPPET MASTERS ☐ STARS LIKE DUST
☐ NEEDLE ☐ SANDS OF MARS ☐ TAKEOFF

Name.....
(Please Print)
Address.....
City.....Zone.....State.....

Selection price in Canada $1.10, plus shipping. Address 105 Bond St., Toronto 2. Offer good only in U.S.A. and Canada.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

APRIL, 1953 Vol. 6, No. 1

Galaxy

SCIENCE FICTION

ALL ORIGINAL STORIES • NO REPRINTS!

CONTENTS

		PAGE
NOVELETS		
MADE IN U.S.A.	*by J. T. M'Intosh*	4
UNIVERSITY	*by Peter Phillips*	64
THE SENTIMENTALISTS	*by Murray Leinster*	118
SHORT STORIES		
SEVENTH VICTIM	*by Robert Sheckley*	38
UNREADY TO WEAR	*by Kurt Vonnegut, Jr.*	98
NON-FACT ARTICLE		
ORIGINS OF GALACTIC LAW	*by Edward Wellen*	87
SCIENCE DEPARTMENT		
FOR YOUR INFORMATION	*by Willy Ley*	52
FEATURES		
EDITOR'S PAGE	*by H. L. Gold*	3
FORECAST		51
GALAXY'S FIVE STAR SHELF	*by Groff Conklin*	114

Cover by SCHOMBURG showing STILL LIFE IN SPACE

ROBERT GUINN, Publisher

H. L. GOLD, Editor WILLY LEY, Science Editor EVELYN PAIGE, Assistant Editor

W. I. VAN DER POEL, Art Director JOAN De MARIO, Production Manager

GALAXY *Science Fiction* is published monthly by Galaxy Publishing Corporation. Main offices: 421 Hudson Street, New York 14, N. Y. 35c per copy. Subscriptions: (12 copies) $3.50 per year in the United States, Canada, Mexico, South and Central America and U.S. Possessions. Elsewhere $4.50. Entered as second-class matter at the Post Office, New York, N. Y. Copyright, 1953, by Galaxy Publishing Corporation. Robert Guinn, president. All rights, including translation, reserved. All material submitted must be accompanied by self-addressed stamped envelopes. The publisher assumes no responsibility for unsolicited material. All stories printed in this magazine are fiction, and any similarity between characters and actual persons is coincidental.

Printed in the U.S.A. by the Guinn Co., Inc. Reg. U.S. Pat. Off.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

COMMON SENSE (II)

WITH a few ill-chosen words in the January editorial called "Common Sense," I unwittingly bumped into a nest that the most truculent hornet would be proud to belong to.

I said we are not faced by the threat of real inflation.

The reaction was so instantaneous and violent that one would think the danger of inflation is necessary to our sacred institutions. That's not how I see it. I sense a fear of losing a fear, perhaps for fear that the eradicated fear will leave room for another and possibly more terrible fear.

If that's so, then I probably have no right trying to alleviate what strikes me as a needless anxiety. But our era is confronted by so many real ones that it seems to me the removal of unreal fears should release energy to tackle genuine problems.

Here is what I was guilty of saying:

"Inflation is a sudden and disastrous gap between the cost of living and income. If income keeps pace with rising prices, the result is a decline in the purchasing power of money, but it is not inflation . . .

"It doesn't matter whether steak cost 10c or $1000 a pound. If wages are $1000 an hour, it won't stay at 10c a pound. If they're 10c an hour, $1000 a pound is cataclysmic. But 10c an hour and 10c a pound and $1000 an hour and $1000 a pound are equal."

Let's be even blunter: they are *exactly* equal, which may be unorthodox economics, but it's a good statement of relativity. It isn't for or against; it's just the seemingly reckless truth that the height or depth of wages and prices is less important than the gap between them.

I don't see evidence of any such gap. As long as there is none, inflation is not a menace.

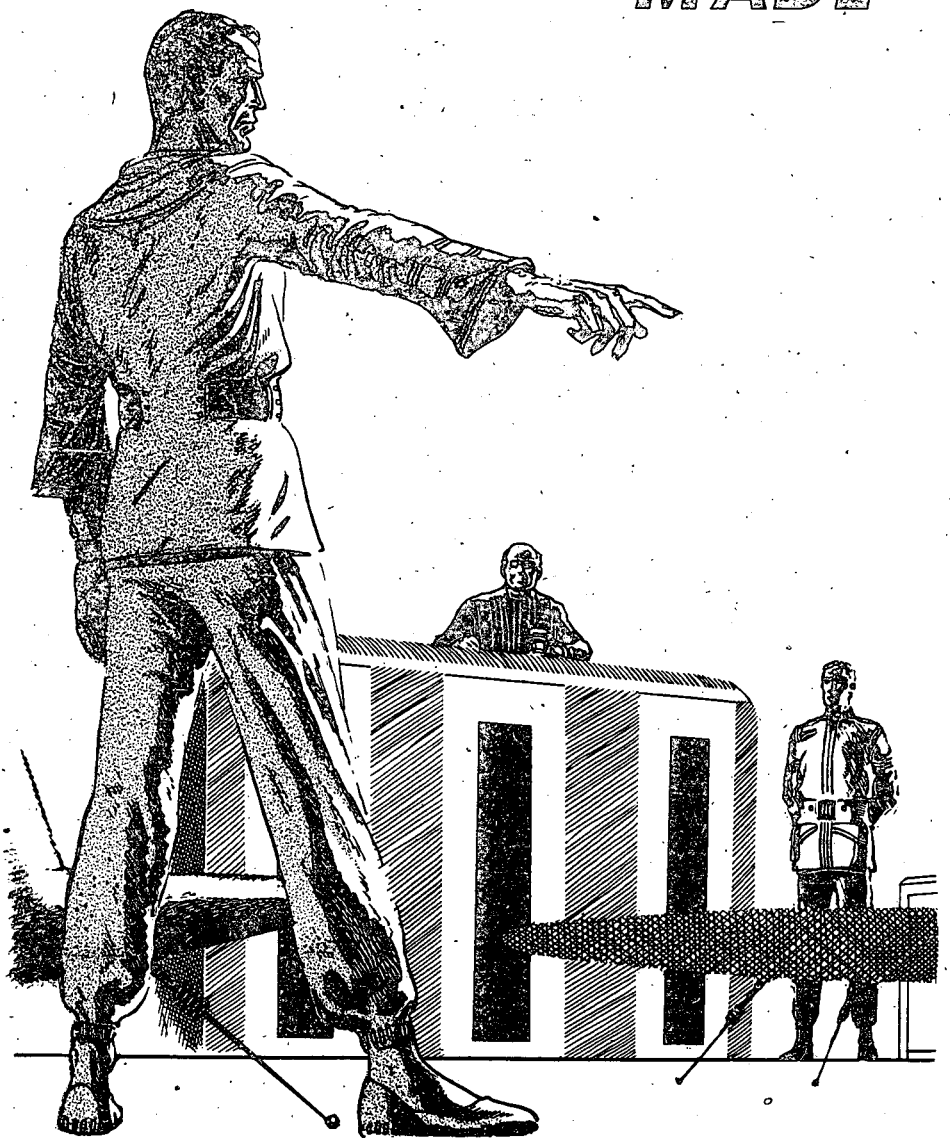
Let's not confuse individual distress with general disaster. Persons and groups with fixed incomes are being pressed hard, no doubt of it. I didn't need the news item one reader sent in, headlined "High Prices Force Worker onto Relief," to convince me; we can all supply affidavits.

But true inflation, which I, along with anyone else who went overseas in World War II, saw in full tornado destructiveness, doesn't merely press hard. It pauperizes. Savings are wiped out. Insurance and other investments become trash. Only goods

(*continued on page* 112)

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

MADE



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

IN U.S.A.

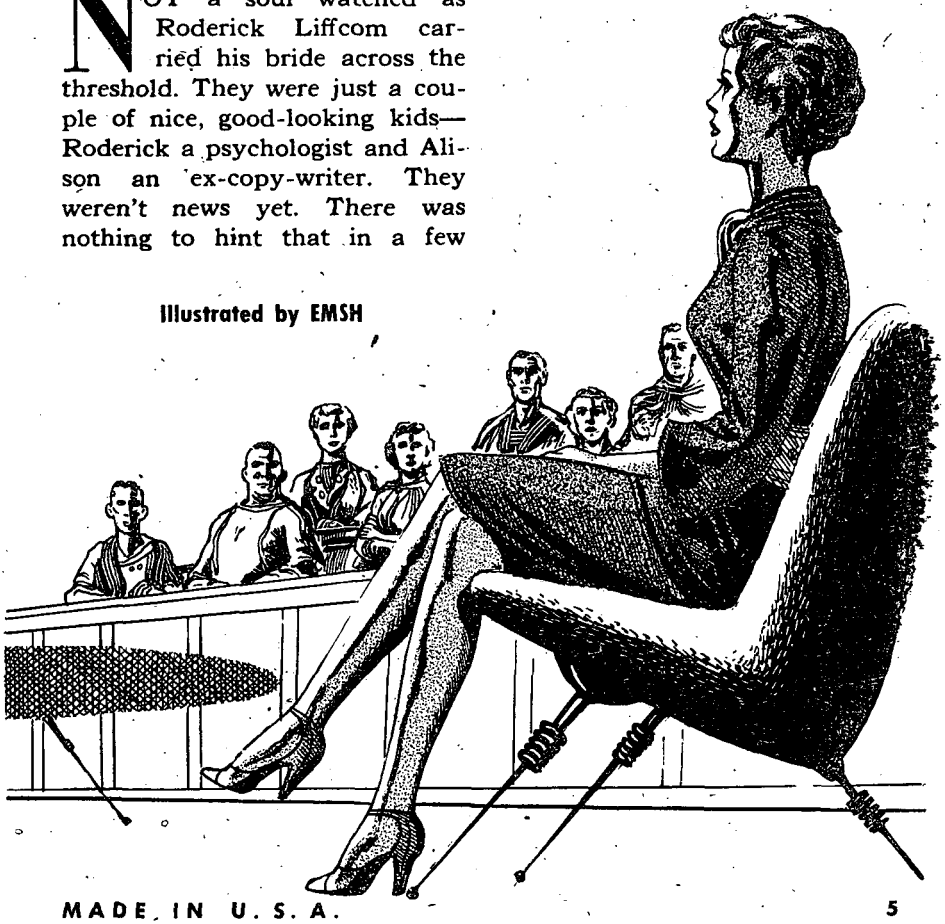
By J. T. M'INTOSH

She couldn't keep the truth from him and he couldn't keep the truth from the world—and so began the strangest divorce trial ever!

I

NOT a soul watched as Roderick Liffcom carried his bride across the threshold. They were just a couple of nice, good-looking kids—Roderick a psychologist and Alison an ex-copy-writer. They weren't news yet. There was nothing to hint that in a few

Illustrated by EMSH



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

days the name of Liffcom would be known to almost everyone in the world, the tag on a case which interested everybody. Not everyone would follow a murder case, a graft case, or an espionage case. But everyone would follow the Liffcom case.

Let's have a good look at them while we have the chance, before the mobs surround them. Roderick was big and strong enough to treat his wife's 115 pounds with contempt, but there was no contempt in the way he held her. He carried her as if she were a million dollars in small bills and there was a strong wind blowing. He looked down at her with his heart in his eyes. He had black hair and brown eyes and one could see at a glance that he could have carried any girl he liked over the threshold.

Alison nestled in his arms like a kitten, eyes half-closed with rapture, arms about his neck. She was blonde and had fantastically beautiful eyes, not to mention the considerable claims to notice of her other features. But even at first glance one would know that there was more to Alison than beauty. It might be brains, or courage, or hard, bitter experience that had tempered her keen as steel. One could see at a glance that she could have been carried over the threshold by any man she liked.

As they went in, it was the end of a story. But let's be different and call it the beginning.

IN the morning, when they were at breakfast on the terrace, the picture hadn't changed radically. That is, Roderick was rather different, blue-chinned and sleepy-eyed and in a brown flannel bathrobe, and Alison was more spectacularly different in a pale green negligee that wasn't so much worn as wafted about. But the way they looked at each other hadn't changed remotely—then.

"There's something," remarked Alison casually, tracing patterns on the damask tablecloth with one slim finger, "that perhaps I ought to tell you."

Two minutes later they were fighting for the phone.

"I want to call my lawyer," Roderick bellowed.

"I want to call my lawyer," Alison retorted.

He paused, the number half dialed. "You can't," he told her roughly. "It's the same lawyer."

She recovered herself first, as she always had. She smiled sunnily. "Shall we toss a coin for him?" she suggested.

"No," said Roderick brutally. Where, oh, where was his great blinding love? "He's mine. I pay him more than you ever could."

"Right," agreed Alison. "I'll

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fight the case myself."

"So will I," Roderick exclaimed, and slammed the receiver down. Instantly he picked it up again. "No, we'll need him to get things moving."

"Collusion?" asked Alison sweetly.

"It was a low, mean, stinking, dirty, cattish, obscene, disgusting, filthy-minded thing to wait until . . ."

"Until what?" Alison asked with more innocence than one would have thought there was in the world.

"Android!" he spat viciously at her.

Despite herself, her eyes flashed with anger.

II

THE newspapers not only mentioned it, they said it at the top of their voices: HUMAN SUES ANDROID FOR DIVORCE. It wasn't much of a headline, for one naturally wondered why a human suing an android for divorce should rate a front-page story. After all, half the population of the world was android. Every day humans divorced humans, humans androids, androids humans, and androids androids. The natural reaction to a headline like that was: "So what? Who cares?"

But it didn't need particular intelligence to realize that there must be something rather special about this case.

The report ran: "Everton, Tuesday. History is made today in the first human vs. android divorce case since the recent grant of full legal equality to androids. It is also the first case of a divorce sought on the grounds that one contracting party did not know the other was an android. This became possible only because the equality law made it no longer obligatory to disclose android origin in any contract.

"Recognizing the importance of this test case, certain to affect millions in the future, *Twenty-four Hours* will cover the case, which opens on Friday, in meticulous detail. Ace reporters Anona Geier and Walter Hallsmith will bring to our readers the whole story of this historic trial. Grier is human and Hallsmith android . . ."

The report went on to give such details as the names of the people in this important test case, and remarked incidentally that although the Liffcom marriage had lasted only ten hours and thirteen minutes before the divorce plea was entered, there had been even briefer marriages recorded.

Twenty-four Hours thus adroitly obviated thousands of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

letters asking breathlessly: "Is this a record?"

III

ALISON, back at her bachelor flat, stretched herself on a divan, focused her eyes past the ceiling on infinity, and thought and thought and thought.

She wasn't particularly unhappy. Not for Alison were misery and resentment and wild, impossible hope. She met the tragedy of her life with placid resignation and even humor.

"Let's face it," she told herself firmly, "I'm hurt. I hoped he'd say, 'It doesn't matter. What difference could that make? It's you I love'—the sort of thing men say in love stories. But what did he say? *Dirty android.*"

Oh, well. Life wasn't like love stories or they wouldn't just be stories.

She might as well admit for a start that she still loved him. That would clarify her feelings.

She should have told him earlier that she was an android. Perhaps he had some excuse for believing she merely waited until non-consummation was no longer grounds for divorce, and then triumphantly threw the fact that she was an android in his lap. (But what good was that supposed to do her?)

It wasn't like that at all, of course. She hadn't told him because they had to get to know each other before the question arose. One didn't say the moment one was introduced to a person: "I'm married," or "I once served five years for theft," or "I'm an android. Are you?"

If in the first few weeks she had known Roderick, some remark had been made about androids, she'd have remarked that she was one herself. But it never had.

When he asked her to marry him, she honestly didn't think of saying she was an android. There were times when it mattered and times when it didn't; this seemed to be one of the latter. Roderick was so intelligent, so liberal-minded, and so easygoing (except when he lost his temper) that she didn't think he would care.

It never did occur to her that he might care. She just mentioned it, as one might say: "I hope you don't mind my drinking iced coffee every morning." Well, almost. She just mentioned it . . .

And happiness was over.

Now an idea was growing in the sad ripple of her thoughts. Did Roderick really want this divorce case, after all, or was he only trying to prove something? Because if he was, she was ready to admit cheerfully that it was proved.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

She wanted Roderick. She didn't quite understand what had happened — perhaps he would take her back on condition that he could trample on her face first. If so, that was all right. She was prepared to let him swear at her and rage at androids and work off any prejudice and hate he might have accumulated somehow, somewhere—as long as he took her back.

SHE reached behind her, picked up the telephone and dialed Roderick's number.

"Hello, Roderick," she said cheerfully. "This is Alison. No, don't hang up. Tell me, why do you hate androids?"

There was such a long silence that she knew he was considering everything, including the advisability of hanging up without a word. It could be said of Roderick that he thought things through very carefully before going off half-cocked.

"I don't hate androids," he barked at last.

"You've got something against android girls, then?"

"No!" he shouted. "I'm a psychologist. I think comparatively straight. I'm not fouled up with race hatred and prejudice and megalomania and—"

"Then," said Alison very quietly, "it's just one particular android girl you hate."

Roderick's voice was suddenly quiet, too. "No, Alison. It has nothing to do with that. It's just . . . children."

So that was it. Alison's eyes filled with tears. That was the one thing she could do nothing about, the thing she had refused even to consider.

"You really mean it?" she asked. "That's not just the case you're going to make out?"

"It's the case I'm going to make out," he replied, "and I mean it. Trouble is, Alison, you hit something you couldn't have figured on. Most people want children, but are resigned to the fact that they're not likely to get them. I was one of a family of eight. The youngest. You'd have thought, wouldn't you, that that line was pretty safe?

"Well, all the others are married. Some have been for a long time. One brother and two sisters have been married twice. That makes a total of seventeen human beings, not counting me. And their net achievement in the way of reproduction is zero.

"It's a question of family continuity, don't you see? I don't think we'd mind if there was *one* child among the lot of us—*one* extension into the future. But there isn't, and there's only this chance left."

Alison dropped as close to misery as she ever did. She un-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

derstood every word Roderick said and what was behind every word. If she ever had a chance of having children, she wouldn't give it up for one individual or love of one individual, either.

But then, of course, she never had it.

In the silence, Roderick hung up. Alison looked down at her own beautiful body and for once couldn't draw a shadow of complacency or content from looking at it. Instead, it irritated her, for it would never produce a child. What was the use of all the appearance, all the mechanism of sex, without its one real function?

But it never occurred to her to give up, to let the suit go undefended. There must be something she could do, some line she could take. Winning the case was nothing, except that that might be a tiny, unimportant part of winning back Roderick.

IV

THE judge was a little pompous, and it was obvious from the start that under the very considerable power he had under the contract-court system, he meant to run this case in his own way and enjoy it.

He clasped his hands on the bench and looked around the packed courtroom happily. He made his introductory remarks with obvious intense satisfaction that at least fifty reporters were writing down every word.

"This has been called an important case," he said, "and it is. I could tell you why it is important, but that would not be justice. Our starting point must be this." He wagged his head in solemn glee at the jury. "We know nothing."

He liked that. He said it again. "*We know nothing.* We don't know the factors involved. We have never heard of androids. All this and more, we have to be told. We can call on anyone anywhere for evidence. And we must make up our minds *here* and *now,* on what we are told *here* and *now,* on the rights and wrongs of this case—and on nothing else."

He had stated his theme and he developed it. He swooped and soared; he shot away out of sight and returned like a swift raven to cast pearls before swine. For, of course, his audience was composed of swine. He didn't say so or drop the smallest hint to that effect, but it wasn't necessary. Only on Roderick and Alison did he cast a fatherly, friendly eye. They had given him his hour of glory. They weren't swine.

But Judge Collier was no fool. Before he had lost the interest he had created, he was back in the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

courtroom, getting things moving.

"I understand," he said, glancing from Alison to Roderick and then back at Alison, which was understandable, "that you are conducting your own cases. That will be a factor tending toward informality, which is all to the good. First of all, will you look at the jury?"

Everyone in court looked at the jury. The jury looked at each other. In accordance with contract-court procedure, Roderick and Alison faced each other across the room, with the jury behind Alison so that they could see Roderick full-face and Alison in profile, and would know when they were lying.

"Alison Liffcom," said the judge, "have you any objection to any member of the jury?"

Alison studied them. They were people, no more, no less. Careful police surveys produced juries that were as near genuine random groups as could reasonably be found.

"No," she said.

"Roderick Liffcom. Have you any objection—"

"Yes," said Roderick belligerently. "I want to know how many of them are androids."

There was a stir of interest in the court.

So it was really to be a human-android battle.

JUDGE Collier's expression did not change. "Out of order," he said. "Humans and androids are equal at law, and you cannot object to any juror because he is an android."

"But this case concerns the rights of humans and androids," Roderick protested.

"It concerns nothing of the kind," replied the judge sternly, "and if your plea is along those lines, we may as well forget the whole thing and go home. You cannot divorce your wife because she is an android."

"But she didn't tell me—"

"Nor because she didn't tell you. No android now is obliged, ever, to disclose—"

"I know all that," said Roderick, exasperated. "Must I state the obvious? I never had much to do with the law, but I do know this—the fact that A equals B may cut no ice, while the fact that B equals A may sew the whole case up. Okay, I'll state the obvious. I seek divorce on the grounds that Alison concealed from me until after our marriage her inability to have a child."

It was the obvious plea, but it was still a surprise to some people. There was a murmur of interest. Now things could move. There was something to argue about.

Alison watched Roderick and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

smiled at the thought that she knew him much better than anyone else in the courtroom did. Calm, he was dangerous, and he was fighting to be calm. And as she looked steadily at him, part of her was wondering how she could upset him and put him off stroke, while the other part was praying that he would be able to control himself and show up well.

She was asked to take the stand and she did it absently, still thinking about Roderick. Yes, she contested the divorce. No, she didn't deny that the facts were as stated. On what grounds did she contest the case, then?

She brought her attention back to the matter in hand. "Oh, that's very simple. I can put it in—" she counted on her fingers—"nine words. How do we know I can't have a child?"

Reporters wrote down the word "sensation." It wouldn't have lasted, but Alison knew that. She piled on more fuel.

"I'm not stating my whole case," she said. "All I'm saying at the moment is . . ." She blushed. She felt it on her face and was pleased with herself. She hadn't been sure she could do it. "I don't like to speak of such things, but I suppose I must. When I married Roderick, I was a virgin. How could I possibly know then that I couldn't have a baby?"

V

IT took a long time to get things back to normal after that. The judge had to exhaust himself hammering with his gavel and threatening to clear the court. But Alison caught Roderick's eye, and he grinned and shook his head slowly. Roderick was two people, at least. He was the hothead, quick to anger, impulsive, emotional. But he was also, though it was hard to believe sometimes, a psychologist, able to sift and weigh and classify things and decide what they meant.

She knew what he meant as he shook his head at her. She had made a purely artificial point, effective only for the moment. She knew she was an android and that androids didn't have children. The rest was irrelevant.

"We have now established," the judge was saying, breathless from shouting and banging with his gavel, "what the case is about and some of the facts. Alison Liffcom admits that she concealed the fact that she was an android, as she was perfectly entitled to do—" He frowned down at Roderick, who had risen. "Well?"

Roderick, at the moment, was the psychologist. "You mentioned the word 'android,' Judge.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Have you forgotten that none of us knows what an android is? You said, I believe: 'We have never heard of androids.' "

Judge Collier clearly preferred the other Roderick, whom he could squash when he liked. "Precisely," he said without enthusiasm. "Do you propose to tell us?"

"I propose to have you told," said Roderick.

Dr. Geller took the stand. Roderick faced him, looking calm and competent. Most of the audience were women. He knew how to make the most of himself, and he did. Dr. Geller, silver-haired, dignified, was as impassive as a statue.

"Who are you, Doctor?" asked Roderick coolly.

"I am director of the Everton Creche, where the androids for the entire state are made."

"You know quite a bit about androids?"

"I do."

"Just incidentally, in case anyone would like to know, do you mind telling us whether you are human or android?"

"Not at all. I am an android."

"I see. Now perhaps you'll tell us what androids are, when they were first made, and why?"

"Androids are just people. No different from humans except that they're made instead of born. I take it you don't want me to tell you the full details of the process. Basically, one starts with a few living cells—that's always necessary—and gradually forms a complete human body. There is no difference. I must stress that. An android is a man or a woman, not in any sense a robot or automaton."

There was a stir again, and the judge smiled faintly. Roderick's witness looked like something of a burden to Roderick. But Roderick merely nodded. Everything, apparently, was under control.

"About two hundred years ago," the doctor went on, "it was shown beyond reasonable doubt that the human race was headed for extinction fairly soon. The population was halving itself every generation. Even if human life continued, civilization could not be maintained . . ."

It was dull for everybody. Even Dr. Geller didn't seem very interested in what he was saying. This was the part that everyone knew already. But the judge didn't interfere. It was all strictly relevant.

AT first the androids had only been an experiment, interesting because they were from the first an astonishingly successful experiment. There was little failure, and a lot of startling success. Once the secret was discovered,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

one could, by artificial means, manufacture creatures who were men and women to the last decimal point. There was only one tiny flaw. They couldn't reproduce, either among themselves or with human partners. Everything was normal except that conception never took place.

But as the human population dropped, and as the public services slowed, became inefficient, or closed down, it was natural that the bright idea should occur to someone: Why shouldn't the androids do it?

So androids were made and trained as public servants. At first they were lower than the beasts. But that, to do humanity justice, lasted only until it became clear that androids were people. Then androids ascended the social scale to the exalted level of slaves. The curious thing, however, was that there was only one way to make androids, and that was to make them as babies and let them grow up. It wasn't possible to make only stupid, imperfect, adult androids. They turned out like humans, good, bad and indifferent.

And then came the transformation. Human births took an upsurge. It was renaissance. There was even unemployment for a while again. It would have been inhuman, of course, to kill off the androids, but on the other hand, if anyone was going to starve, they might as well.

They did.

No more androids were made. Human births subsided. Androids were manufactured again. Human births rose.

It became obvious at last. The human race had not so much been extinguishing itself with birth control as actually failing to reproduce. Most people, men and women, were barren these days. But a certain proportion of this barrenness was psychological. The androids were a challenge. They stimulated a stubborn strain deep in humans.

So a balance was reached. Androids were made for two reasons only—to have that challenging effect that kept the human race holding its ground, almost replacing its losses, and to do all the dirty work of keeping a juggernaut of an economic system functioning smoothly for a decimated population.

Even in the early days, the androids had champions. Curiously enough, it wasn't a matter of the androids fighting for and winning equality, but of humans fighting among each other and gradually giving the androids equality.

The humans who fought most were those who couldn't have children. All these people could do if they were to have a family

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

was adopt baby androids. Naturally they lavished on them all the affection and care that their own children would have had. They came to look on them as their own children. They therefore were very strongly in favor of any move to remove restrictions on androids. One's own son or daughter shouldn't be treated as an inferior being.

That was some of the story, as Dr. Geller sketched it. The court was restive, the judge looked at the ceiling, the jury looked at Alison. Only Roderick was politely attentive to Dr. Geller.

VI

EVERYONE knew at once when the lull was over. If anyone missed Roderick's question, no one missed the doctor's answer: "—reasonably established that androids cannot reproduce. At first there was actually some fear that they might. It was thought that the offspring of android and human would be some kind of monster. But reproduction did not occur."

"Just one more point, Doctor," said Roderick easily. "There is, I understand, some method of identification — some means of telling human from android, and vice versa?"

"There are two," replied the doctor. Some of the people in court looked up, interested. Others made their indifference obvious to show that they knew what was coming. "The first is the fingerprint system. It is just as applicable to androids as to humans, and every android at every creche is fingerprinted. If for any reason it becomes necessary to identify a person who may or may not be android, prints are taken. Once these have been sent to every main android center in the world—a process which takes only two weeks—the person is either positively identified as android or by elimination is known to be human."

"There is no possibility of error?"

"There is always the possibility of error. The system is perfect, but to err is human—and, if I may be permitted the pleasantry, android as well."

"Quite," said Roderick. "But may we take it that the possibility of error in this case is small?"

"You may. As for the other method of identification: this is a relic of the early days of android manufacture and many of us feel — but that is not germane."

For the first time, however, he looked somewhat uncomfortable as he went on: "Androids, of course, are not born. There is no umbilical cord. The navel is

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

small, even and symmetrical, and faintly but quite clearly marked inside it are the words—in this country, at any rate—'Made in U.S.A.'"

A wave of sniggers ran round the court. The doctor flushed faintly. There were jokes about the little stamp that all androids carried. Once there had been political cartoons with the label as the motif. The point of one allegedly funny story came when it was discovered that a legend which was expected to be 'Made in U.S.A.' turned out to be 'Fabriqué en France' instead.

IT had always been something humans could jibe about, the stamp that every android would carry on his body to his grave. Twenty years ago, all persecution of androids was over, supposedly, and androids were free and accepted and had all but the same rights as humans. Yet twenty years ago, women's evening dress invariably revealed the navel, whatever else was chastely concealed. Human girls flaunted the fact that they were human. Android girls either meekly showed the proof or, by hiding it, admitted they were android.

"There is under review," said the doctor, "a proposal to discontinue what some people feel must always be a badge of subservience—"

"That is *sub judice*," interrupted the judge, "and no part of the matter in question. We are concerned with things as they are." He looked inquiringly at Roderick. "Have you finished with the witness?"

"Not only the witness," said Roderick, "but my case." He looked so pleased with himself that Alison, who was difficult to anger, wanted to hit him. "You have heard Dr. Geller's evidence. I demand that Alison submit herself to the two tests he mentioned. When it is established that she is an android, it will also be established that she cannot have a child. And that she therefore, by concealing her android status from me, also concealed the fact that she could not have a child."

The judge nodded somewhat reluctantly. He looked over his glasses at Alison without much hope. It would be a pity if such a promising case were allowed to fizzle out so soon and so trivially. But he personally could see nothing significant that Alison could offer in rebuttal.

"Your witness," said Roderick, with a gesture that called for a kick in the teeth, or so Alison thought.

"Thank you," she said sweetly. She rose from her seat and crossed the floor. She wore a plain gray suit with a vivid yellow blouse,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

only a little of it visible, supplying the necessary touch of color. She had never looked better in her life and she knew it.

Roderick looked as though he were losing the iron control which he had held for so long against all her expectations, and she did what she could to help by wriggling her skirt straight in the way he had always found so attractive.

"Stop that!" he hissed at her. "This is serious."

She merely showed him twenty-eight of her perfect teeth, and then turned to Dr. Geller.

VII

"I WAS most interested in a phrase you used, Doctor," said Alison. "You said it was 'reasonably established' that androids could not reproduce. Now I take it I have the facts correct. You are director of the Everton Creche?"

"Yes."

"And your professional experience is therefore confined to androids up to the age of ten?"

"Yes."

"Is it usual for even humans," asked Alison, "to reproduce before the age of ten?"

There was stunned silence, then a laugh, then applause. "This is not a radio show," shouted the judge. "Proceed, if you please, Mrs. Liffcom."

Alison did. Dr. Geller was the right man to come to for all matters relating to *young* androids, she said apologetically, but for matters relating to adult androids (no offense to Dr. Geller intended, of course), she proposed to call Dr. Smith.

Roderick interrupted. He was perfectly prepared to hear Alison's case, but hadn't they better conclude his first? Was Alison prepared to submit herself to the two tests mentioned?

"It's unnecessary," said Alison. "I am an android. I am not denying it."

"Nevertheless—" said Roderick.

"I don't quite understand, Mr. Liffcom," the judge put in. "If there were any doubt, yes. But Mrs. Liffcom is not claiming that she is not an android."

"I want to *know*."

"Do you think there is any doubt?"

"I only wish there were."

It was "sensation" again.

"And yet it's all perfectly natural, when you consider it," said Roderick, when he could be heard. "I want a divorce because Alison is an android and can't have a child. If she's been mistaken, or has been playing some game, or whatever it might be, I don't want a divorce. I want Alison, the girl I married. Surely

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

that's easy enough to understand?"

"All right," said Alison emotionlessly. "It'll take some time to check my fingerprints, but the other test can be made now. What do I do, Judge, peel here in front of everybody?"

"Great Scott, no!"

Five minutes later, in the jury room, the judge, the jury and Roderick examined the proof. Alison surrendered none of her dignity or self-possession while showing it to them.

There was no doubt. The mark of the android was perfectly clear.

Roderick was last to look. When he had examined the brand, his eyes met Alison's, and she had to fight back the tears. For he wasn't satisfied or angry, only sorry.

BACK in court, Roderick said he waived the fingerprint test. And Alison called Dr. Smith. He was older than Dr. Geller, but bright-eyed and alert. There was something about him — people leaned forward as he took the stand, knowing somehow that what he had to say was going to be worth hearing.

"Following the precedent of my learned friend," said Alison, "may I ask you if you are human or android, Dr. Smith?"

"You may. I am human. However, most of my patients have been android."

"Why is that?"

"Because I realized long ago that androids represented the future. Humans are losing the fight. That being so, I wanted to find out what the differences between humans and androids were, or if there were any at all. If there were none, so much the better— the human race wasn't going to die out, after all."

"But of course," said Alison casually, yet somehow everyone hung on her words, "there was one essential difference. Humanity was becoming sterile, but androids couldn't reproduce."

"There was no difference," said Dr. Smith.

Sometimes an unexpected statement produces silence, sometimes bedlam. Dr. Smith got both in turn. There was the stillness of shock as he elaborated and put his meaning beyond doubt.

"*Androids can have and have had children.*"

Then the rest was drowned in a wave of gasps, whispers and exclamations that swelled in a few seconds to a roar. The judge hammered and shouted in vain.

There was anger in the shouts. There was excitement, anxiety, incredulity, fear. Either the doctor was lying or he wasn't. If he was lying, he would suffer for it. People tricked by such a hoax

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

are angry, vengeful, people.

If he wasn't lying, everyone must re-evaluate his whole view of life. Everyone—human and android. The old religious questions would come up again. The question would be decided of whether Man, himself becoming extinct, had actually conquered life, instead of merely reaching a compromise with it. It would cease to matter whether any person was born or made.

There would be no more androids, only human beings. And Man would be master of creation.

VIII

THE court sat again after a brief adjournment. The judge peered at Alison and at Dr. Smith, who was again on the stand.

"Mrs. Liffcom," he said, "would you care to take up your examination at the same point?"

"Certainly," said Alison. She addressed herself to Dr. Smith. "You say that androids can have children?"

This time there was silence except for the doctor's quiet voice. "Yes. There is, as may well be imagined, conflicting evidence on this. The evidence I propose to bring forward has frequently been discredited. The reaction when I first made this statement shows why. It is an important question on which everyone must have reached some conclusion. Possibly one merely believes what one is told."

As he went on, Alison cast a glance at Roderick. At first he was indifferent. He didn't believe it. Then he showed mild interest in what the doctor was saying. Eventually he became so excited that he could hardly sit still.

And Alison began to hope again.

"There is a psychologist in court," remarked the doctor mildly, "who may soon be asking me questions. I am not a psychologist any more than any other general practitioner, but before I mention particular cases, I must make this point. Every android grows up knowing he or she cannot have children. That is accepted in our civilization.

"I don't think it should be accepted. I'll tell you why."

No one interrupted him. He wasn't spectacular, but he wasted no time.

He mentioned the case of Betty Gordon Holbein, 178 years before. No one had heard of Betty Gordon Holbein. She was human, said the doctor. Prostrate with shock, she testified she had been raped by an android. The android concerned was lynched. In due course, Betty Holbein had a normal child.

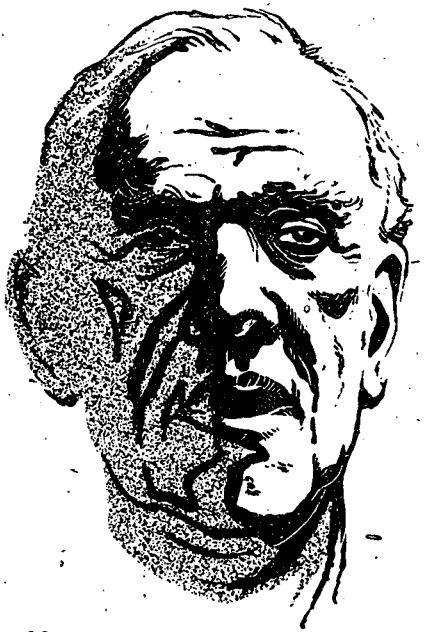
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"The records are available to everyone," said the doctor. "There was a lot of interest and indignation when the girl was raped, very little when she had her child. The suggestion that she had conceived after the incident was denied, without much publicity, or belief, for even then it was *known* that androids were barren."

RODERICK was on his feet. He looked at the judge, who nodded.

"Look, are you twisting this to make a legal case," he demanded, "or did this girl—"

"You cannot ask the witness if he is perjuring himself," remarked the judge reprovingly.



"I don't give a damn about perjury!" Roderick exclaimed. "I just want to know if this is true!"

It was all very irregular; but Alison knew he might explode any moment and swear at the doctor and the judge. She didn't want that. So her eyes met his and she said levelly: "It's true, Roderick."

Roderick sat down.

"Now to get a true picture," the doctor continued, "we must remember that millions of androids were being tested, and mating among themselves, and even having irregular liaisons with humans—and no conception took place. Or did it?"

A little over a century ago, an android girl had been found in a wood, alive, but only just. Around her there were marks of many feet. She had been mutilated. Though she lived, she was never quite sane after that.

But she also had a child.

Roderick rose again, frowning. "I don't understand," he said. "If this is true, why is it not known?"

The judge was going to intervene, but Roderick went on quickly, "The doctor and I are professional men. I can ask him for a professional opinion, surely? Well, Doctor?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Because it has always been possible to disbelieve what one has decided to disbelieve. In this case, that nameless woman was mutilated so that the navel mark would be removed. There was a record of her fingerprints as those of an android. But it was authoritatively stated that there must have been a mistake and that, by having a child, the woman had thus been proved to be human."

A century and a half ago, Winnie—androids had begun to have at least a first name by this time—had a child and it was again decided that this girl, who had been a laundry maid, must have been mixed up with an android while a baby and was in fact human.

A little dead baby was found buried in a garden and an android couple was actually in court over the matter. But since they were androids, it could obviously not be their child, and they were discharged.

Roderick jumped up again. "If you knew this," he asked Dr. Smith, "why keep it secret until now?"

"Five years ago," said the doctor, "I wrote an article on the subject. I sent it to all the medical journals. Eventually one of the smaller publications printed it. I had half a dozen letters from people who were interested. Then nothing more.

"One must admit," he added, "that not one of the cases I have mentioned—as reported at the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

time—would be accepted as positive scientific proof that androids can reproduce. The facts were recorded for posterity by people who didn't believe them. But . . ."

"But," said Alison, a few minutes later, when the doctor had finished giving his evidence, "in view of this, it can hardly be stated that I *know* I cannot have a child. It may be unlikely; shall I call more medical evidence to show how unlikely conception is for the average human woman?"

JUDGE Collier said nothing, so she continued: "The present position, as anyone concerned with childbirth would tell you, is that few marriages produce children, but those that do produce a lot. People who *can* have children go on doing it, these days.

"Now I want to introduce a new point. It is not grounds for divorce among humans if the woman is barren and is not aware of it. It *is*, on the other hand, if she has had an operation which makes it impossible for her to have children and she conceals the fact."

"I see what you are getting at," said the judge, "and it is most ingenious. Finish it, please."

"Having had no such operation," said Alison, "and being able to prove it, I understand that I can't be held, legally, to have known that I could never have children."

"To save reference to case histories," said the judge contentedly, "I can say here and now that the lady is right. It is for the jury to decide on the merits of the case, but Mrs. Liffcom may be said to have established—"

"I demand an adjournment," said Roderick.

There was a low murmur that gradually died out. Roderick and Alison were both on their feet, staring at each other across ten yards of space. The intensity of their feeling could be felt by everyone in the courtroom.

"Court adjourned until tomorrow," said the judge hastily.

IX

ALMOST every newspaper which mentioned the Liffcom case committed contempt of court. Perhaps the feeling was that no action could be taken against so many. All the newspapers went into the rights and wrongs of the affair as if they were giving evidence, too. Very little of the material was pro- or anti-android. It was, rather, for or against the evidence brought up.

Anyone could see, remarked one newspaper bluntly, that Ali-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

son Liffcom was nobody's fool. If a woman like that went to the trouble of defending a suit of any kind, she would dig up something good and play it to the limit. This was no aspersion on the morals or integrity of Mrs. Liffcom, for whom the newspaper had the keenest admiration. All she had to do was cast the faintest doubt on the truism that androids could not reproduce. She had done that.

But that, of course, said the paper decisively, didn't mean that androids *could*.

Another newspaper took it from there. Just as good a case, it remarked, could have been made out for spiritualism, telepathy, possession, the existence of werewolves . . . Dr. Smith, who was undoubtedly sincere, had been misled by a few mistakes. Obviously, when androids were human in all respects save one, *some* humans would be passed off or mistaken for androids and vice versa. Equally obviously, the mistake would only be discovered if and when conception occurred, as in the cases quoted by Dr. Smith.

A third paper even offered Alison a point to make in court if she liked. True enough, Dr. Smith had shown that such mistakes could occur. It was only necessary for Alison then to quote these cases and stress the possibility that the same thing might have happened to her. If the proof of android origin was not proof, the case would collapse.

Other papers, however, took the view that there might be something in the possibility that androids could reproduce. Why not? asked one. Androids weren't bloodless, inferior beings. One could keep things warm by holding them against the human body —or by building a fire. In the same way, children could be nurtured in a human body or in culture tanks. The results were identical. They must be identical if one could take them forty years later, give them rigorous tests, and tell one from the other only because the android was stamped "Made in U.S.A." and because his fingerprints were on file.

People had believed androids could not have children because they had been told androids never had. Now they were told androids *had* reproduced. Where was the difficulty? You believed you had finished your cigarettes until you took out the pack and saw there was one left. What did you do then—say you had finished them, therefore that what looked like a cigarette wasn't, and throw it away?

And almost all the newspapers, whatever their general view,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

asked the real, fundamental question as well.

That artificially made humans could conceive was credible, in theory. That they could not was also credible, in theory.

But why one in a million, one in five million, one in ten million? Even present-day humans could average one fertile marriage in six.

X

"IF you have no objections," said Roderick politely—determined to be on his best behavior, thought Alison — "let's turn this into a court of inquiry. Let's say, if you like, that Alison has successfully defended the case on the grounds that she can't legally be said to have known she couldn't have a child. Forget the divorce. That's not the point."

"I thought it was," the judge objected, dazed.

"Anyone can see that what matters now," said Roderick impatiently, "is what Dr. Smith brought up. Let's get down to the question of whether there's any prospect of Alison having a baby."

"A courtroom is hardly the place to settle that," murmured Alison. But she felt the first warm breath of a glow of happiness she had thought she would never be able to experience again.

"Women always go from the general to the particular," Roderick retorted. "I don't mean the question of whether you *will* have children. I mean the question of whether it's really possible that you might."

The judge rapped decisively. "I have been too lenient. I insist on having a certain amount of order in my own court. Roderick Liffcom, do you withdraw your suit?"

"What does it matter? Anyway, if you must follow that line, we'd have to have a few straight questions and answers like whether Alison still loves me."

The judge gasped.

"Do you?" demanded Roderick, glaring at Alison.

Alison felt as if her heart was going to explode. "If you want a straight answer," she said, "yes."

"Good," said Roderick with satisfaction. "Now we can go on from there."

He turned to glower at Judge Collier, who was trying to interrupt.

"Look here," Roderick demanded, "are you interested in getting at the truth?"

"Certainly, but—"

"So am I. Be quiet, then. I meant to keep my temper with you, but you're constantly getting in my hair. Alison, would you mind taking the stand?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There was no doubt that Roderick had personality.

With Alison on the stand, he turned to the jury. "I'll tell you what I have in mind," he told them in friendly fashion. "We all wonder why, if this thing's possible, it's happened so seldom. Unfortunately, to date there hasn't been any real admission that it is possible, so I didn't know. I never had a chance to work on it. Now I have. What I want to know is, if androids can have children, what prevents them from doing so."

He reached out absently, without looking around, and squeezed Alison's shoulder. "We've got Alison here," Roderick went on. "Let's find out if we can, shall we, what would stop her from having children?"

Alison was glad she was sitting down. Her knees felt so weak that she knew they wouldn't support her. Did she have Roderick back or didn't she? Could she really have a baby? *Roderick*'s baby? The court swam dizzily in front of her eyes.

Only gradually did she become aware of Roderick's voice asking anxiously if she was all right, Roderick bending over her, Roderick's arm behind her back, supporting her.

"Yes," she said faintly. "I'm sorry. Roderick, I'll help you all I can, but do you think there's really very much chance?"

"I'm a psychologist," he reminded her quietly, "and since you've never seen me at work, there's no harm in telling you I'm pretty good. Maybe we won't work this out here in half an hour, but we'll get through it in the next sixty years."

Alison didn't forget where she was, but everything was so crazy that a little more wouldn't hurt. She reached up and drew his lips down to hers.

XI

"WHAT I'm looking for must be in the life of every android, male and female," said Roderick. "I don't expect to find it right away. Just tell us, Alison, about any times when you were aware of distinction—when you were made aware that you were an android, not a human. Start as early as you like.

"And," he added with a sudden, unexpected grin, "please address your remarks to the judge. Let's keep this as impersonal as we can."

Alison composed her mind for the job. She didn't really want to look back. She wanted to look into the new, marvelous future. But she forced herself to begin.

"I grew up in the New York Android Creche," she said. "There was no distinction there.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Some of the children thought there was. Sometimes I heard older children talking about how much better off they would be if they were humans. But twice when there was overcrowding in the creche and plenty of room at the orphanage for human children, I was moved to the orphanage. And there was absolutely no difference.

"In a creche, it's far more important to be able to sell yourself than it ever can be later. If you're attractive or appealing enough, someone looking for a child to adopt will notice you and you'll have a home and security and affection. I wasn't attractive or appealing. I stayed in the creche until I was nine. I saw so many couples looking for children, always taking away some child but never me, that I was sure I would stay there until I was too old to be adopted and then have to earn my living, always on my own.

"Then, one day, one of the sisters at the creche found me crying—I forget what I was crying about—and told me there was no need for me to cry about anything because I had brains and I was going to be a beauty, and what more could any girl want? I looked in the mirror, but I still seemed the same as ever. She must have known what she was talking about, though, for just a week later, a couple came and looked around the creche and picked me."

Alison took a deep breath, and there was no acting about the tears in her eyes.

"Nobody who's never experienced it can appreciate what it is to have a home for the first time at the age of nine," she said. "To say I'd have died for my new parents doesn't tell half of it. Maybe this is something that misled Roderick. He knew that twice a month, at least, I go and see my folks. He must have thought they were my real parents, so he didn't ask if I was android."

She looked at Roderick for the first time since she started the story. He nodded.

"Go on, Alison," he said quietly. "You're doing fine."

"This isn't a hard world for androids," Alison insisted. "It's only very occasionally . . ."

She stopped, and Roderick had to prompt her. "Only very occasionally that what?"

But Alison wasn't with him. She was eleven years back in the past.

XII

ALISON had known all about that awkward period when she would cease to be a child and become a woman. But she had

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

never quite realized how rapid it would be, and how it would seem even more rapid, so that it was over before she was ready for it to start.

She wasn't sleeping well, but she was so healthy and had such reserves of strength that it didn't show, and for once her adopted parents failed her. Though Alison would never admit that, it would have been so much easier if Susan had talked with her, and Roger, without saying a word, had indicated in his manner that he knew what was going on.

One day she was out walking, trying to tire herself for sleep later, and ran into a group of youths of her own age in the woods. She knew one of them slightly, Bob Thomson, and she knew that their apparent leader, as tall as a man at fifteen, was Harry Hewitt. She didn't know whether any of them were androids or not—the question had never occurred to her. And it didn't seem of any immediate interest or importance that she was an android, either, as she passed through them and some of them whistled, and involuntarily, completely aware of their eyes on her, she reddened.

She saw Bob Thomson whisper to Harry Hewitt and Hewitt burst out: "Android, eh? *Android!* That's fine!" He stepped in front of her and barred her path. "What a pretty android," he said loudly, playing to his gallery. "I've seen you before, but I thought you were just a girl. Take off your blouse, android."

There was a startled movement in the group, and someone nudged Hewitt.

"It's all right," he said. "She's an android. No real parents, only people who have taken her in to pretend they can have kids."

Alison looked from side to side like a cornered animal.

"Humans can do anything they like with androids," Hewitt told his more timorous companions. "Don't you know that?" He turned back to Alison. "But we must be sure she is an android. Hold her, Butch."

Alison was grasped firmly by the hips, which had so recently stopped being boyish and swelled alarmingly. She kicked and struggled, her heart threatening to burst, but Butch, whoever he was, was strong. Two other boys held her arms. Carefully, to a chorus of nervous, excited sniggers, Hewitt parted her blouse and skirt a narrow slit and peered at her navel.

"Made in U.S.A.," he said with satisfaction. "It's all right, then."

In contrast to his previous cautious, decorous manner, he tore the blouse out of her waistband and ripped it off. Alison's knees

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sagged as someone behind her began to fumble with her brassiere.

"No, *no*!" Hewitt exclaimed in mock horror. "Mustn't do that until she says you can. Even androids have rights. Or at least, if they haven't, we should be polite and pretend they have. Android, say we can do whatever we like with you."

"No!" cried Alison.

"That's too bad. Shift your grip a bit, Butch."

The rough hands went up around her ribs, rasping her soft skin.

Alison struggled and twisted wildly.

"Keep still," said Hewitt. He spoke very quietly, but there was savage joy in his face. Slowly and carefully, he loosened Alison's belt and eased her skirt and the white trunks under it down to the pit of her stomach. Then he took out a heavy clasp knife, opened it and set the point neatly in the center of her belly. Alison drew in her stomach; the knife point followed, indenting the flesh.

"Say we can do whatever we like with you, android."

The knife pricked deeper. A tiny drop of crimson came from under it and ran slowly down to Alison's skirt. Her nerve broke.

"You can do whatever you like with me!" she screamed.

HER brassiere came loose and fluttered to the ground. Hewitt's knife cut her belt and her skirt began to slip over her hips. Butch's hands went down to her waist again, biting into it cruelly. From behind, a hand tentatively touched her breast and another clutched her shoulder. One at a time, her feet were raised and the shoes taken off them and thrown in the bushes.

But someone else had heard Alison's scream. Long after she had thought no one would come, someone did.

"Hell," said Hewitt as one of his companions shouted and pointed, "something always spoils everything. Beat it, boys."

They were gone. Alison clutched her skirt and looked behind her thankfully. A man and a woman were only a few yards from her. The woman was young and heavy with child. Humans, both of them. She opened her mouth to thank them, to explain, to weep.

But they were looking at her as if she were a crushed beetle of some kind.

"Android, of course," said the man disgustedly. "Dirty little beast."

"Hardly more than a child," the woman said, "and already at this."

"I think I'll give her a good hiding," the man went on.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Won't do any good, I suppose, but . . ."

Alison burst into tears and darted among the bushes. She didn't wait to see whether the man started after her. Branches and thorns tore her skin. Her skirt dropped and tripped her. She flew headlong, flinched away from a thorny bush, slammed hard into a tree-trunk, and waited on the ground, sick and breathless, for the man to beat her.

Her legs and arms and shoulders were covered with long scratches and a wiry branch had lashed her ribs like a whip, leaving a long weal. But that didn't matter. A twisted root was digging into her side — that, too, didn't matter. Nothing mattered. Why had no one told her she was an inferior being? Somehow she had known; she had always known. But no one had ever *shown* her before.

She realized afterward why the man and the woman, who must have seen or guessed what had really happened, had spoken as they did. They had, or were going to have, children. They hated all androids. Androids were unnecessary, their enemies, and the enemies of their children.

But at the time she merely waited helpless, incapable of thought. The man would come and beat her, Susan and Roger would turn her away, and she would never know happiness again.

XIII

"MY parents never knew about that," said Alison. "I hid in the bushes until it was dark, and then went straight home. I climbed into my bedroom from the outhouse and pretended later I'd been there for hours."

"Why didn't you tell anyone?" Roderick asked.

Alison shrugged. "It was a small incident that concerned me alone. I knew, once I'd had time to think, that my adopted parents would be upset and angry, but not at me. I thought I'd better keep it to myself. I wasn't hurt and none of it matters when you look back on it, does it?"

"How about the man who was going to give you a good hiding?"

"I never saw him again. It was two years later when I got my first punishment."

"Just a minute," said Roderick. "You said that even then you knew you were an inferior being—you had always known, but this was the first time anyone showed you. How had you known? Who or what had told you? When? Where?"

Alison tried. They could see her try. But she had to say: "I don't know."

"All right," said Roderick, as

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

if it weren't important. "What was this that happened two years later?"

"Perhaps I am giving too much significance to these incidents," Alison remarked apologetically. "Certainly they happened. But when I say 'two years passed,' perhaps I'm not making it clear that in those two years hardly anything happened, hardly anything was said or done, to remind me I was an android and not a human being.

"When I was about sixteen or seventeen, I suddenly developed a talent for tennis. I had played since I was quite young, but just as front-rank players run in and out of form, I improved quite unexpectedly. I joined a new club. I was picked for an important match. I was in singles, mixed and women's doubles. I did well, but that's not the point.

"After the match, my doubles partner told me I was wanted in the locker room. There was something strange about the way she told me, but I couldn't place it. I wondered if I'd broken some rule, failed to check with someone, played in the wrong match, or forgotten to bow three times to the east—you know what these clubs are like."

"No, we don't," said Judge Collier. "We know nothing, remember? Tell us."

Unexpectedly, he got an approving nod from the unpredictable Roderick.

XIV

ALISON smiled uncertainly as she followed Veronica. She wasn't nervous or sensitive as a rule; she seldom felt apprehension. She was curious, naturally, and even wilder possibilities suggested themselves. Had she been mistaken for someone else? Had someone stolen something and they thought she'd done it? Had someone inspected her racket and found it was an inch too wide?

The whole team was waiting in the locker room. It looked serious, especially when she saw their expressions. It still didn't occur to her that the fact that she was an android could have anything to do with it. Only once in her life had there been any real indication that in some way androids were inferior beings.

But that was what it was. Bob Walton, the captain of the team, said gravely that their opponents, well beaten, had accused them of recruiting star androids to help them.

Alison laughed. "That's a new one. I've heard some peculiar excuses. Made them myself, too—the light was bad, the umpire was crazy, I had a stone in my shoe, people were moving about, the net was too high. But never

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

'You fielded androids against us.' Androids are just ordinary people—good and bad tennis players. The open singles champion is an android, but the number one woman is human. You know that as well as I do. Might as well complain because you're beaten by tall people, or short people, or people with long arms."

Everyone had relaxed.

"Sorry, Alison," said Walton. "It's just that none of us knew you *weren't* an android."

Alison frowned. "What's all this? I'm an android, sure. I didn't say so only because nobody asked me."

"We took it for granted," said Walton stiffly, "that you would know . . . as, of course, you did. There are no androids competing in the Athenian League. We try to keep one group, at least, clean."

He looked at the other two men in the team and inclined his head. Without a word they left the room, all three of them.

Alison, left with the other three girls, one of whom she had kept out of the team, looked exasperated.

"This is nonsense," she said. "If you like to run an all-human league, that's all right as far as I'm concerned, but you should put up notices to avoid misunderstanding. I didn't know you were—"

"Whether you knew or not is beside the point," said Veronica coldly—the same Veronica who had laughed and talked and won a match with Alison only a few minutes before. "We're going to make sure you never forget."

THEY closed in on her. It was to be a fight, apparently. Alison didn't mind. She jabbed Veronica in the ribs and sent her gasping across the room. She expected them to tear her clothes, thinking it would be conventional in dealing with android girls. But it was quite different from the scene in the bushes. This was clean and sporting. The men had left, very properly, and instead of half a dozen youths with a knife against a terrified child, it was only three girls to one.

Alison fought hard, but fair. She guessed that, if she didn't fight clean, it would be ammunition for the android-haters. To do them justice, the other girls were clean, too. They didn't mind hurting her, but they didn't go for her face, use their nails or yank her hair.

Alison gave a good account of herself, but other things being equal, three will always overcome one. She was turned on her face on the floor. One of the girls sat on her legs and one on her shoulders while the third beat the seat of her shorts with a

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

firmly swung racket.

It was no joke. Alison wouldn't have made a sound if it had been far worse, but when they let her go, she was feeling sorry for herself. They left her alone in the room.

She picked herself up and dusted herself off. The floor was clean and the mirror in one corner showed that she looked all right. In fact, she looked considerably better than the three girls who had beaten her.

Still angry, she was able to grin philosophically at the thought that she could beat them all in a beauty contest and at tennis. She could tell herself, if she liked, that they were jealous of her. It was probably at least partly true.

Her feelings were hurt, but there was no other damage. She could even see their point of view.

XV

"WHAT *was* their point of view?" asked Roderick.

"Well, they were human and they were snobs. They'd even have admitted they were snobs, if you put the question the right way. It was a private club—"

"And it was quite reasonable," suggested Roderick softly, "that they should exclude androids, who are inferior beings."

"No, not quite that," Alison protested, laughing. "I don't really believe . . ."

She stopped.

"Just sometimes?" Roderick persisted. "Or just one part of you, while the other knows quite well an android is as good as a human?"

Alison shivered suddenly. "You know, I have a curious feeling, as if I were being trapped into something."

"That's how people always feel," said Roderick, "just before they decide they needn't be terrified any more of spiders or whatever it was they feared."

The court was very quiet. There was something about Roderick's professional competence and Alison's determination to cooperate that made any kind of interruption out of the question.

"There's very little more I can say about this," said Alison. "I took a job, not because I had to, but because I wanted to. It was with an advertising agency. They knew I was an android. They paid me exactly what they paid anyone else. When I did well, they gave me a raise.

"But then I noticed something —I never got any credit for anything. When I had an idea, somehow it was always possible to give the credit to someone else. Soon there was a very curious

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

situation. I held a very junior position, I had little or no standing, but I did responsible work and I was paid well for it.

"I went to another agency and it was quite different. Again, they knew I was an android, but no one seemed remotely interested. When I did well, I was promoted. When I did badly on any job, my chief swore at me and called me a fool and an incompetent and an empty-headed glamor girl and a lot of things I'd rather not repeat here.

"But it never seemed to occur to him to call me a dirty android. I don't think he was an android himself, either.

"I joined a dramatic society, but again I chose the wrong club. They didn't mind at all that I was an android. They didn't keep me in small parts. But it was perfectly natural that the three human girls in the cast shouldn't want to use the same dressing room as another android girl in the show and I did. When we were at small places, she and I had to change in the wings.

"There were scores of other little incidents of the same kind. They multiplied as I grew older —not because differentiation was getting worse, but because I was moving in higher society. In places where it's held against you that you didn't go to Harvard or Yale, naturally it's a disadvantage if you're an android, besides.

"Then a law was passed and it was no longer necessary to admit being an android. I don't know what the Athenian Tennis League did about that. I'd come to Everton then and hardly anyone knew I was an android. And the plain fact, despite everything I've said, is that hardly anyone cared. There are so many androids, so many humans. You may find yourself the only android in a group—or the only human.

"Then I met Roderick."

"There," said Roderick, "I think we can stop." He turned to the judge. "I'm withdrawing my suit, of course. I think I made that clear quite a while ago."

He gave Alison his arm. "Come on, sweetheart, let's go."

THE roar burst out again. It must have been both one of the noisiest and one of the quietest trials on record. The judge, dignity forgotten, was standing up, hopping from one foot to the other in impatience and vexation.

"You can't go like that!" he shrieked. "We haven't finished . . . we don't know . . ."

"I've gone as far as I can here," said Roderick. He hesitated as the roar grew. "All right," he went on, raising his voice. "But you don't explain

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

people to themselves. Any little quirks that make them do funny things, or not do normal things, you get them gradually to explain to you, and to themselves."

He searched in his pockets and pulled out a key ring. "Go and wait in the car, honey," he said, and told Alison where it was. She went, dazed.

"I'll have to keep the papers from her for a day or two," Roderick went on, almost to himself. "After that, it won't matter." He turned his attention to the court. "All right, then, listen. If I'm right, I've found something that's been under everyone's nose for two hundred years and has never been seen before. I don't say I found it in five minutes. I've been working it out for the last twenty-four hours, with the help of quite a few records of android patients.

"Will you listen?" he yelled as the excited chatter increased. "I don't want to tell you this. I want to go home with Alison. You've seen her. Wouldn't you want to?"

The court gradually settled.

"Let's consider human sterility for a moment," said Roderick. "As you might imagine, some of it's medical and some psychological. As a psychologist, I've cured people of so-called barrenness—and when I did, of course, it wasn't sterility at all, but a neurosis. These people didn't and don't have children because, owing to some unconscious conclusion they've reached, they don't want them, feel they shouldn't have them, or are certain they can't have them.

"But that's only some. Others come to me and, in consultation with a specialist in that line, I find there's nothing psychological about it whatever.

"I have an idea, now, that *all* androids are psychologically sterile. Sterility has eaten into the cycle of human reproduction but how should it touch the androids? If one android can reproduce, they all can. Unless they, like these humans I've cured, have reached unconscious conclusions to the effect that androids can't or shouldn't or mustn't have children.

"And we know they nearly all have."

HIS voice suddenly dropped, and when Roderick spoke quietly, he was emphasizing points and people listened. There was no murmuring now.

"I think if you were to run a survey and find who now is continuing to deny — passionately, honestly, sincerely — that androids can reproduce, you'd find the most passionate, honest and sincere are androids. If you looked into the past, I think

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

you'd find the same thing. Wasn't it significant that it had to be a *human* doctor who declared publicly that androids weren't sterile?

"Into every android is built the psychological axiom that an android must be inferior to a human to survive. That's the answer. Androids don't come to me to be cured of this because they don't *want* to be cured of it. They know it's essential to them. With the more aware part of their brains, they may know exactly the opposite, but that doesn't count when it comes to things like this.

"And long ago, without knowing it, androids picked on this. Androids could not be a menace if they couldn't reproduce. Androids would be duly inferior if they couldn't reproduce. Androids would be allowed to exist if they couldn't reproduce. Androids could compete with humans in other things if they couldn't reproduce."

He knew he was right as he looked around the court. For once, almost at a glance, it was possible to tell humans from androids. Half the people in court were interested, bored, amused, indifferent, thoughtful—the humans. The other half were angry, frightened, ashamed, apathetic, resentful, wildly excited, or in tears . . . for Roderick was tearing at the very foundation of their world.

"I have real hopes for Alison," he remarked mildly, "because she brought in Dr. Smith. See what that means? Not one android in a thousand could have done it. She must love me a lot . . . but that's none of your business."

He went the way Alison had gone. No one tried to stop him this time. At the door, he paused.

"When the first acknowledged android children are born," he observed, "it'll mean that regardless of the trials or disasters mankind still has to face, the *human* race won't die out. Because . . . I think we might all chew a little on this point . . . the children of androids can't be android, can they?"

XVII

RODERICK drove. Alison usually did when they were out in a car together, but there was an unspoken agreement that Roderick would have to take charge of almost everything for a while.

"We both won," she said happily. "At least, we will have when little Roderick arrives."

"Do you believe he will?" asked Roderick, in his professional, neutral tone.

"Not quite. I wonder what you

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

said in the court. I suppose I'm not to try to find out?"

"Find out if you like. But do it from yourself. From what's in you. I'll help."

"I think," Alison mused, "it must be something to do with Dr. Smith."

"Oh? Why?"

"Because I had the most peculiar feeling when I remembered hearing about him and the idea that androids could have children. Like when Hewitt had his knife in my stomach, only as if . . ."

She laughed nervously, uncomfortably. "As if I were holding it myself, and had to cut something out, but couldn't do it without killing myself. Yet I had a sort of idea I could cut it out, if I tried hard enough and long enough, and *not* kill myself."

Roderick turned the corner into their street. "This is a little unprofessional," he said, the exhilaration in his voice ill-concealed, "but I don't think it'll do any harm with you, Alison. There is going to be a little Roderick. I didn't decide it. *You* decided it. And it won't kill you. And—God, look at that!"

Cameras clicked like grasshoppers as Roderick Liffcom carried his bride across the threshold. The photographers hadn't had to follow them, for they knew where the Liffcoms were going. Scores of plates were exposed. The Liffcoms were news. The name of Liffcom was known to almost everyone.

Roderick was big and strong enough to treat his wife's 115 pounds with contempt, but there was no contempt in the way he held her. He carried her as if she was made of crystal which the faintest jar would shatter. One could see at a glance that he could have carried any girl he liked over the threshold.

Alison nestled in his arms like a kitten, eyes half-closed with rapture, arms about Roderick's neck. One could see at a glance she could have been carried over the threshold by any man she liked.

As they went in, it was the beginning of a story. But let's be different and call it the end.

—J. T. M'INTOSH

DON'T MISS THE ANNOUNCEMENT . . .
. . . ON PAGES 96 & 97 . . .

For the biggest, most lucrative and attractive novel contest in the entire history of science fiction!

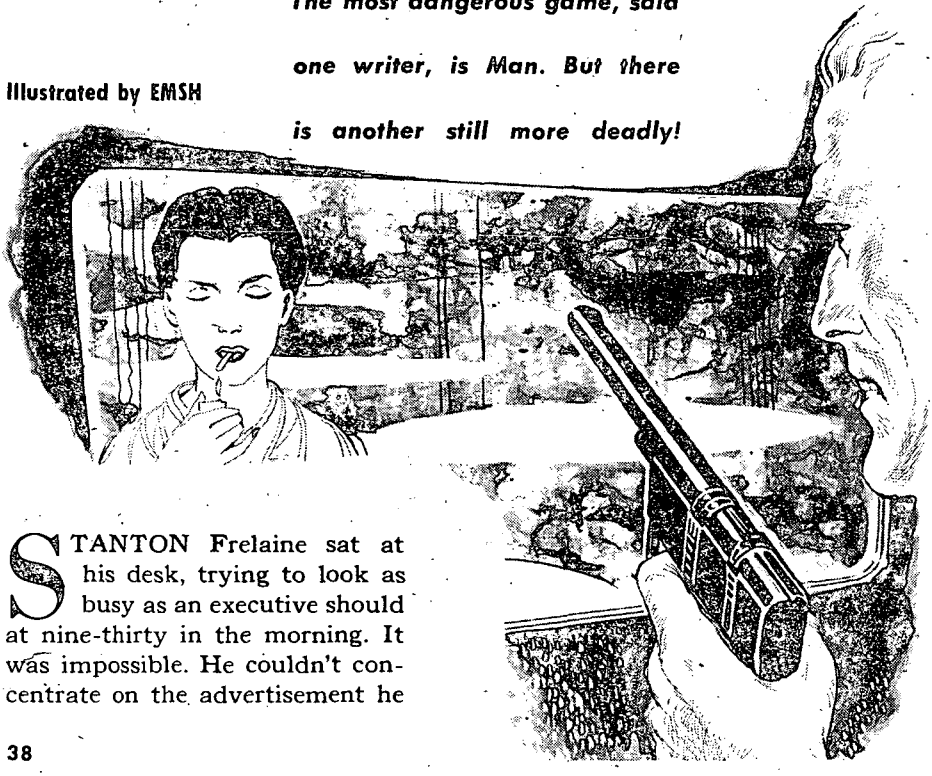
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

seventh victim

By ROBERT SHECKLEY

The most dangerous game, said one writer, is Man. But there is another still more deadly!

Illustrated by EMSH



STANTON Frelaine sat at his desk, trying to look as busy as an executive should at nine-thirty in the morning. It was impossible. He couldn't concentrate on the advertisement he

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

had written the previous night, couldn't think about business. All he could do was wait until the mail came.

He had been waiting for his notification for two weeks now. The government was behind schedule, as usual.

The glass door of his office was marked *Morger and Frelaine, Clothiers*. It opened, and E. J. Morger walked in, limping slightly from his old gunshot wound. His shoulders were bent; but at the age of seventy-three, he wasn't worrying too much about his posture.

"Well, Stan?" Morger asked. "What about that ad?"

Frelaine had joined Morger sixteen years ago, when he was twenty-seven. Together they had built Protec-Clothes into a million-dollar concern.

"I suppose you can run it," Frelaine said, handing the slip of paper to Morger. If only the mail would come earlier, he thought.

"'Do you own a Protec-Suit?'" Morger read aloud, holding the paper close to his eyes. "'The finest tailoring in the world has gone into Morger and Frelaine's Protec-Suit, to make it the leader in men's fashions.'"

Morger cleared his throat and glanced at Frelaine. He smiled and read on.

"'Protec-Suit is the safest as well as the smartest. Every Protec-Suit comes with special built-in gun pocket, guaranteed not to bulge. No one will know you are carrying a gun—except you. The gun pocket is exceptionally easy to get at, permitting fast, unhindered draw. Choice of hip or breast pocket.' Very nice," Morger commented.

Frelaine nodded morosely.

"'The Protec-Suit Special has the fling-out gun pocket, the greatest modern advance in personal protection. A touch of the concealed button throws the gun into your hand, cocked, safeties off. Why not drop into the Protec-Store nearest you? Why not *be safe?*'

"That's fine," Morger said. "That's a very nice, dignified ad." He thought for a moment, fingering his white mustache. "Shouldn't you mention that Protec-Suits come in a variety of styles, single and double-breasted, one and two button rolls, deep and shallow flares?"

"Right. I forgot."

FRELAINE took back the sheet and jotted a note on the edge of it. Then he stood up, smoothing his jacket over his prominent stomach. Frelaine was forty-three, a little overweight, a little bald on top. He was an amiable-looking man with cold eyes.

"Relax," Morger said. "It'll

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

come in today's mail."

Frelaine forced himself to smile. He felt like pacing the floor, but instead sat on the edge of the desk.

"You'd think it was my first kill," he said, with a deprecating smile.

"I know how it is," Morger said. "Before I hung up my gun, I couldn't sleep for a month, waiting for a notification. I know."

The two men waited. Just as the silence was becoming unbearable, the door opened. A clerk walked in and deposited the mail on Frelaine's desk.

Frelaine swung around and gathered up the letters. He thumbed through them rapidly and found what he had been waiting for—the long white envelope from ECB, with the official government seal on it.

"That's it!" Frelaine said, and broke into a grin. "That's the baby!"

"Fine." Morger eyed the envelope with interest, but didn't ask Frelaine to open it. It would be a breach of etiquette, as well as a violation in the eyes of the law. No one was supposed to know a Victim's name except his Hunter. "Have a good hunt."

"I expect to," Frelaine replied confidently. His desk was in order—had been for a week. He picked up his briefcase.

"A good kill will do you a world of good," Morger said, putting his hand lightly on Frelaine's padded shoulder. "You've been keyed up."

"I know." Frelaine grinned again and shook Morger's hand.

"Wish I was a kid again," Morger said, glancing down at his crippled leg with wryly humorous eyes. "Makes me want to pick up a gun again."

The old man had been quite a Hunter in his day. Ten successful hunts had qualified him for the exclusive Tens Club. And, of course, for each hunt Morger had had to act as Victim, so he had twenty kills to his credit.

"I sure hope my Victim isn't anyone like you," Frelaine said, half in jest.

"Don't worry about it. What number will this be?"

"The seventh."

"Lucky seven. Go to it," Morger said. "We'll get you into the Tens yet."

Frelaine waved his hand and started out the door.

"Just don't get careless," warned Morger. "All it takes is a single slip and I'll need a new partner. If you don't mind, I like the one I've got now."

"I'll be careful," Frelaine promised.

INSTEAD of taking a bus, Frelaine walked to his apartment. He wanted time to cool

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

off. There was no sense in acting like a kid on his first kill.

As he walked, Frelaine kept his eyes strictly to the front. Staring at anyone was practically asking for a bullet, if the man happened to be serving as Victim. Some Victims shot if you just glanced at them. Nervous fellows. Frelaine prudently looked above the heads of the people he passed.

Ahead of him was a huge billboard, offering J. F. O'Donovan's services to the public.

"Victims!" the sign proclaimed in huge red letters. "Why take chances? Use an O'Donovan accredited Spotter. Let us locate your assigned killer. Pay *after* you get him!"

The sign reminded Frelaine. He would call Morrow as soon as he reached his apartment.

He crossed the street, quickening his stride. He could hardly wait to get home now, to open the envelope and discover who his victim was. Would he be clever or stupid? Rich, like Frelaine's fourth Victim, or poor, like the first and second? Would he have an organized Spotter service, or try to go it on his own?

The excitement of the chase was wonderful, coursing through his veins, quickening his heartbeat. From a block or so away, he heard gunfire. Two quick shots, and then a final one.

Somebody got his man, Frelaine thought. Good for him.

It was a superb feeling, he told himself. He was *alive* again.

AT his one-room apartment, the first thing Frelaine did was call Ed Morrow, his spotter. The man worked as a garage attendant between calls.

"Hello, Ed? Frelaine."

"Oh, hi, Mr. Frelaine." He could see the man's thin, grease-stained face, grinning flat-lipped at the telephone.

"I'm going out on one, Ed."

"Good luck, Mr. Frelaine," Ed Morrow said. "I suppose you'll want me to stand by?"

"That's right. I don't expect to be gone more than a week or two. I'll probably get my notification of Victim Status within three months of the kill."

"I'll be standing by. Good hunting, Mr. Frelaine."

"Thanks. So long." He hung up. It was a wise safety measure to reserve a first-class spotter. After his kill, it would be Frelaine's turn as Victim. Then, once again, Ed Morrow would be his life insurance.

And what a marvelous spotter Morrow was! Uneducated—stupid, really. But what an eye for people! Morrow was a natural. His pale eyes could tell an out-of-towner at a glance. He was diabolically clever at rigging an ambush. An indispensable man.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Frelaine took out the envelope, chuckling to himself, remembering some of the tricks Morrow had turned for the Hunters. Still smiling, he glanced at the data inside the envelope.

Janet-Marie Patzig.

His Victim was a female!

Frelaine stood up and paced for a few moments. Then he read the letter again. Janet-Marie Patzig. No mistake. A girl. Three photographs were enclosed, her address, and the usual descriptive data.

Frelaine frowned. He had never killed a female.

He hesitated for a moment, then picked up the telephone and dialed.

"Emotional Catharsis Bureau, Information Section," a man's voice answered.

"Say, look," Frelaine said. "I just got my notification and I pulled a girl. Is that in order?" He gave the clerk the girl's name.

"It's all in order, sir," the clerk replied after a minute of checking micro-files. "The girl registered with the board under her own free will. The law says she has the same rights and privileges as a man."

"Could you tell me how many kills she has?"

"I'm sorry, sir. The only information you're allowed is the victim's legal status and the descriptive data you have received."

"I see." Frelaine paused. "Could I draw another?"

"You can refuse the hunt, of course. That is your legal right. But you will not be allowed another Victim until you have served. Do you wish to refuse?"

"Oh, no," Frelaine said hastily. "I was just wondering. Thank you."

HE hung up and sat down in his largest armchair, loosening his belt. This required some thought.

Damn women, he grumbled to himself, always trying to horn in on a man's game. Why can't they stay home?

But they were free citizens, he reminded himself. Still, it just didn't seem *feminine*.

He knew that, historically speaking, the Emotional Catharsis Board had been established for men and men only. The board had been formed at the end of the fourth world war—or sixth, as some historians counted it.

At that time there had been a driving need for permanent, lasting peace. The reason was practical, as were the men who engineered it.

Simply—annihilation was just around the corner.

In the world wars, weapons increased in magnitude, efficiency and exterminating power. Soldiers became accustomed to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

them, less and less reluctant to use them.

But the saturation point had been reached. Another war would truly be the war to end all wars. There would be no one left to start another.

So this peace *had* to last for all time, but the men who engineered it were practical. They recognized the tensions and dislocations still present, the cauldrons in which wars are brewed. They asked themselves why peace had never lasted in the past.

"Because men like to fight," was their answer.

"Oh, no!" screamed the idealists.

But the men who engineered the peace were forced to postulate, regretfully, the presence of a need for violence in a large percentage of mankind.

Men aren't angels. They aren't fiends, either. They are just very human beings, with a high degree of combativeness.

With the scientific knowledge and the power they had at that moment, the practical men could have gone a long way toward breeding this trait out of the race. Many thought this was the answer.

The practical men didn't. They recognized the validity of competition, love of battle, strength in the face of overwhelming odds. These, they felt, were admirable traits for a race, and insurance toward its perpetuity. Without them, the race would be bound to retrogress.

The tendency toward violence, they found, was inextricably linked with ingenuity, flexibility, drive.

The problem, then: To arrange a peace that would last after they were gone. To stop the race from destroying itself, without removing the responsible traits.

The way to do this, they decided, was to rechannel Man's violence.

Provide him with an outlet, an expression.

The first big step was the legalization of gladiatorial events, complete with blood and thunder. But more was needed. Sublimations worked only up to a point. Then people demanded the real thing.

There is no substitute for murder.

SO murder was legalized, on a strictly individual basis, and only for those who wanted it. The governments were directed to create Emotional Catharsis Boards.

After a period of experimentation, uniform rules were adopted.

Anyone who wanted to murder could sign up at the ECB. Giving certain data and assur-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ances; he would be granted a Victim.

Anyone who signed up to murder, under the government rules, had to take his turn a few months later as Victim—if he survived.

That, in essence, was the setup. The individual could commit as many murders as he wanted. But between each, he had to be a Victim. If he successfully killed his Hunter, he could stop, or sign up for another murder.

At the end of ten years, an estimated third of the world's civilized population had applied for at least one murder. The number slid to a fourth, and stayed there.

Philosophers shook their heads, but the practical men were satisfied. War was where it belonged—in the hands of the individual.

Of course, there were ramifications to the game, and elaborations. Once its existence had been accepted it became big business. There were services for Victim and Hunter alike.

The Emotional Catharsis Board picked the Victims' names at random. A Hunter was allowed six months in which to make his kill. This had to be done by his own ingenuity, unaided. He was given the name of his Victim, address and description, and allowed to use a standard caliber pistol. He could wear no armor of any sort.

The Victim was notified a week before the Hunter. He was told only that he was a Victim. He did not know the name of his Hunter. He was allowed his choice of armor, however. He could hire spotters. A spotter couldn't kill; only Victim and Hunter could do that. But he could detect a stranger in town, or ferret out a nervous gunman.

The Victim could arrange any kind of ambush in his power to kill the Hunter.

There were stiff penalties for killing or wounding the wrong man, for no other murder was allowed. Grudge killings and gain killings were punishable by death.

The beauty of the system was that the people who wanted to kill could do so. Those who didn't—the bulk of the population—didn't have to.

At least, there weren't any more big wars. Not even the imminence of one.

Just hundreds of thousands of small ones.

FRELAINE didn't especially like the idea of killing a woman; but she *had* signed up. It wasn't his fault. And he wasn't going to lose out on his seventh hunt.

He spent the rest of the morning memorizing the data on his Victim, then filed the letter.

Janet Patzig lived in New

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

York. That was good. He enjoyed hunting in a big city, and he had always wanted to see New York. Her age wasn't given, but to judge from her photographs, she was in her early twenties.

Frelaine phoned for jet reservations to New York, then took a shower. He dressed with care in a new Protec-Suit Special made for the occasion. From his collection he selected a gun, cleaned and oiled it, and fitted it into the fling-out pocket of the suit. Then he packed his suitcase.

A pulse of excitement was pounding in his veins. Strange, he thought, how each killing was a new excitement. It was something you just didn't tire of, the way you did of French pastry or women or drinking or anything else. It was always new and different.

Finally, he looked over his books to see which he would take.

His library contained all the good books on the subject. He wouldn't need any of his Victim books, like L. Fred Tracy's *Tactics for the Victim,* with its insistence on a rigidly controlled environment, or Dr. Frisch's *Don't Think Like a Victim!*

He would be very interested in those in a few months, when he was a Victim again. Now he wanted hunting books.

Tactics for Hunting Humans was the standard and definitive work, but he had it almost memorized. *Development of the Ambush* was not adapted to his present needs.

He chose *Hunting in Cities,* by Mitwell and Clark, *Spotting the Spotter,* by Algreen, and *The Victim's Ingroup,* by the same author.

Everything was in order. He left a note for the milkman, locked his apartment and took a cab to the airport.

IN New York, he checked into a hotel in the midtown area, not too far from his Victim's address. The clerks were smiling and attentive, which bothered Frelaine. He didn't like to be recognized so easily as an out-of-town killer.

The first thing he saw in his room was a pamphlet on his bedtable. *How to Get the Most out of your Emotional Catharsis,* it was called, with the compliments of the management. Frelaine smiled and thumbed through it.

Since it was his first visit to New York, Frelaine spent the afternoon just walking the streets in his Victim's neighborhood. After that, he wandered through a few stores.

Martinson and Black was a fascinating place. He went through their Hunter-Hunted room. There were lightweight

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

bulletproof vests for Victims, and Richard Arlington hats, with bulletproof crowns.

On one side was a large display of a new .38 caliber sidearm.

"Use the Malvern Strait-shot!" the ad proclaimed. "ECB-approved. Carries a load of twelve shots. Tested deviation less than .001 inch per 1000 feet. Don't miss your Victim! Don't risk your life without the best! Be safe with Malvern!"

Frelaine smiled. The ad was good, and the small black weapon looked ultimately efficient. But he was satisfied with the one he had.

There was a special sale on trick canes, with concealed four-shot magazine, promising safety and concealment. As a young man, Frelaine had gone in heavily for novelties. But now he knew that the old-fashioned ways were usually the best.

Outside the store, four men from the Department of Sanitation were carting away a freshly killed corpse. Frelaine regretted missing the kill.

He ate dinner in a good restaurant and went to bed early.

Tomorrow he had a lot to do.

The next day, with the face of his Victim before him, Frelaine walked through her neighborhood. He didn't look closely at anyone. Instead, he moved rapidly, as though he were really going somewhere, the way an old Hunter should walk.

He passed several bars and dropped into one for a drink. Then he went on, down a side street off Lexington Avenue.

There was a pleasant sidewalk cafe there. Frelaine walked past it.

And there she was! He could never mistake the face. It was Janet Patzig, seated at a table, staring into a drink. She didn't look up as he passed.

FRELAINE walked to the end of the block. He turned the corner and stopped, hands trembling.

Was the girl crazy, exposing herself in the open? Did she think she had a charmed life?

He hailed a taxi and had the man drive around the block. Sure enough, she was just sitting there. Frelaine took a careful look.

She seemed younger than her pictures, but he couldn't be sure. He would guess her to be not much over twenty. Her dark hair was parted in the middle and combed above her ears, giving her a nunlike appearance. Her expression, as far as Frelaine could tell, was one of resigned sadness.

Wasn't she even going to make an attempt to defend herself?

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Frelaine paid the driver and hurried to a drugstore. Finding a vacant telephone booth, he called ECB.

"Are you sure that a Victim named Janet-Marie Patzig has been notified?"

"Hold on, sir." Frelaine tapped on the door while the clerk looked up the information. "Yes, sir. We have her personal confirmation. Is there anything wrong, sir?"

"No," Frelaine said. "Just wanted to check."

After all, it was no one's business if the girl didn't want to defend herself.

He was still entitled to kill her.

It was his turn.

He postponed it for that day, however, and went to a movie. After dinner, he returned to his room and read the ECB pamphlet. Then he lay on his bed and glared at the ceiling.

All he had to do was pump a bullet into her. Just ride by in a cab and kill her.

She was being a very bad sport about it, he decided resentfully, and went to sleep.

THE next afternoon, Frelaine walked by the cafe again. The girl was back, sitting at the same table. Frelaine caught a cab.

"Drive around the block very slowly," he told the driver.

"Sure," the driver said, grinning with sardonic wisdom.

From the cab, Frelaine watched for spotters. As far as he could tell, the girl had none. Both her hands were in sight upon the table.

An easy, stationary target.

Frelaine touched the button of his double-breasted jacket. A fold flew open and the gun was in his hand. He broke it open and checked the cartridges, then closed it with a snap.

"Slowly, now," he told the driver.

The taxi crawled by the cafe. Frelaine took careful aim, centering the girl in his sights. His finger tightened on the trigger.

"Damn it!" he said.

A waiter had passed by the girl. He didn't want to chance winging someone else.

"Around the block again," he told the driver.

The man gave him another grin and hunched down in his seat. Frelaine wondered if the driver would feel so happy if he knew that Frelaine was gunning for a woman.

This time there was no waiter around. The girl was lighting a cigarette, her mournful face intent on her lighter. Frelaine centered her in his sights, squarely above the eyes, and held his breath.

Then he shook his head and put the gun back in his pocket.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The idiotic girl was robbing him of the full benefit of his catharsis.

He paid the driver and started to walk.

It's too easy, he told himself. He was used to a real chase. Most of the other six kills had been quite difficult. The Victims had tried every dodge. One had hired at least a dozen spotters. But Frelaine had gotten to them all by altering his tactics to meet the situation.

Once he had dressed as a milkman, another time as a bill collector. The sixth Victim he had had to chase through the Sierra Nevadas. The man had clipped him, too. But Frelaine had done better than that.

How could he be proud of this one? What would the Tens Club say?

That brought Frelaine up with a start. He wanted to get into the club. Even if he passed up this girl, he would have to defend himself against a Hunter. Surviving that, he would still be four hunts away from membership. At that rate, he might never get in.

HE began to pass the cafe again, then, on impulse, stopped abruptly.

"Hello," he said.

Janet Patzig looked at him out of sad blue eyes, but said nothing.

"Say, look," he said, sitting down. "If I'm being fresh, just tell me and I'll go. I'm an out-of-towner. Here on a convention. And I'd just like someone feminine to talk to. If you'd rather I didn't—"

"I don't care," Janet Patzig said tonelessly.

"A brandy," Frelaine told the waiter. Janet Patzig's glass was still half full.

Frelaine looked at the girl and he could feel his heart throbbing against his ribs. This was more like it—having a drink with your Victim!

"My name's Stanton Frelaine," he said, knowing it didn't matter.

"Janet."

"Janet what?"

"Janet Patzig."

"Nice to know you," Frelaine said, in a perfectly natural voice. "Are you doing anything tonight, Janet?"

"I'm probably being killed tonight," she said quietly.

Frelaine looked at her carefully. Did she realize who he was? For all he knew, she had a gun leveled at him under the table.

He kept his hand close to the fling-out button.

"Are you a Victim?" he asked.

"You guessed it," she said sardonically. "If I were you, I'd stay out of the way. No sense getting hit by mistake."

Frelaine couldn't understand

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the girl's calm. Was she a suicide? Perhaps she just didn't care. Perhaps she wanted to die.

"Haven't you got any spotters?" he asked, with the right expression of amazement.

"No." She looked at him, full in the face, and Frelaine saw something he hadn't noticed before.

She was very lovely.

"I am a bad, bad girl," she said lightly. "I got the idea I'd like to commit a murder, so I signed for ECB. Then—I couldn't do it."

FRELAINE shook his head, sympathizing with her.

"But I'm still in, of course. Even if I didn't shoot, I still have to be a Victim."

"But why don't you hire some spotters?" he asked.

"I couldn't kill anyone," she said. "I just couldn't. I don't even have a gun."

"You've got a lot of courage," Frelaine said, "coming out in the open this way." Secretly, he was amazed at her stupidity.

"What can I do?" she asked listlessly. "You can't hide from a Hunter. Not a real one. And I don't have enough money to make a real disappearance."

"Since it's in your own defense, I should think—" Frelaine began, but she interrupted.

"No. I've made up my mind on that. This whole thing is wrong, the whole system. When I had my Victim in the sights—when I saw how easily I could—I could—"

She pulled herself together quickly.

"Oh, let's forget it," she said, and smiled.

Frelaine found her smile dazzling.

After that, they talked of other things. Frelaine told her of his business, and she told him about New York. She was twenty-two, an unsuccessful actress.

They had supper together. When she accepted Frelaine's invitation to go to the Gladiatorials, he felt absurdly elated.

He called a cab—he seemed to be spending his entire time in New York in cabs—and opened the door for her. She started in. Frelaine hesitated. He could have pumped a shot into her at that moment. It would have been very easy.

But he held his hand. Just for the moment, he told himself.

THE Gladiatorials were about the same as those held anywhere else, except that the talent was a little better. There were the usual historical events, swordsmen and netmen, duels with saber and foil.

Most of these, naturally, were fought to the death.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Then bull fighting, lion fighting and rhino fighting, followed by the more modern events. Fights from behind barricades with bow and arrow. Dueling on a high wire.

The evening passed pleasantly.

Frelaine escorted the girl home, the palms of his hands sticky with sweat. He had never found a woman he liked better. And yet she was his legitimate kill.

He didn't know what he was going to do.

She invited him in and they sat together on the couch. The girl lighted a cigarette for herself with a large lighter, then settled back.

"Are you leaving soon?" she asked him.

"I suppose so," Frelaine said. "The convention is only lasting another day."

She was silent for a moment. "I'll be sorry to see you go. Send roses to my funeral."

They were quiet for a while. Then Janet went to fix him a drink. Frelaine eyed her retreating back. Now was the time. He placed his hand near the button.

But the moment had passed for him, irrevocably. He wasn't going to kill her. You don't kill the girl you love.

The realization that he loved her was shocking. He'd come to kill, not to find a wife.

She came back with the drink and sat down opposite him, staring at emptiness.

"Janet," he said. "I love you."

She sat, just looking at him. There were tears in her eyes.

"You can't," she protested. "I'm a Victim. I won't live long enough, to—"

"You won't be killed. I'm your Hunter."

She stared at him a moment, then laughed uncertainly.

"Are you going to kill me?" she asked.

"Don't be ridiculous," he said. "I'm going to marry you."

Suddenly she was in his arms.

"Oh, Lord!" she gasped. "The waiting — I've been so frightened—"

"It's all over," he told her. "Think what a story it'll make for our kids. How I came to murder you and left marrying you."

She kissed him, then sat back and lighted another cigarette.

"Let's start packing," Frelaine said. "I want—"

"Wait," Janet interrupted. "You haven't asked if I love you."

"What?"

She was still smiling, and the cigarette lighter was pointed at him. In the bottom of it was a black hole. A hole just large enough for a .38 caliber bullet.

"Don't kid around," he objected, getting to his feet.

"I'm not being funny, darling," she said.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

IN a fraction of a second, Frelaine had time to wonder how he could ever have thought she was not much over twenty. Looking at her now—*really* looking at her—he knew she couldn't be much less than thirty. Every minute of her strained, tense existence showed on her face.

"I don't love you, Stanton," she said very softly, the cigarette lighter poised.

Frelaine struggled for breath. One part of him was able to realize detachedly what a marvelous actress she really was. She must have known all along.

Frelaine pushed the button, and the gun was in his hand, cocked and ready.

The blow that struck him in the chest knocked him over a coffee table. The gun fell out of his hand. Gasping, half-conscious, he watched her take careful aim for the *coup de grace*.

"Now I can join the Tens," he heard her say elatedly as she squeezed the trigger.

—ROBERT SHECKLEY

FORECAST

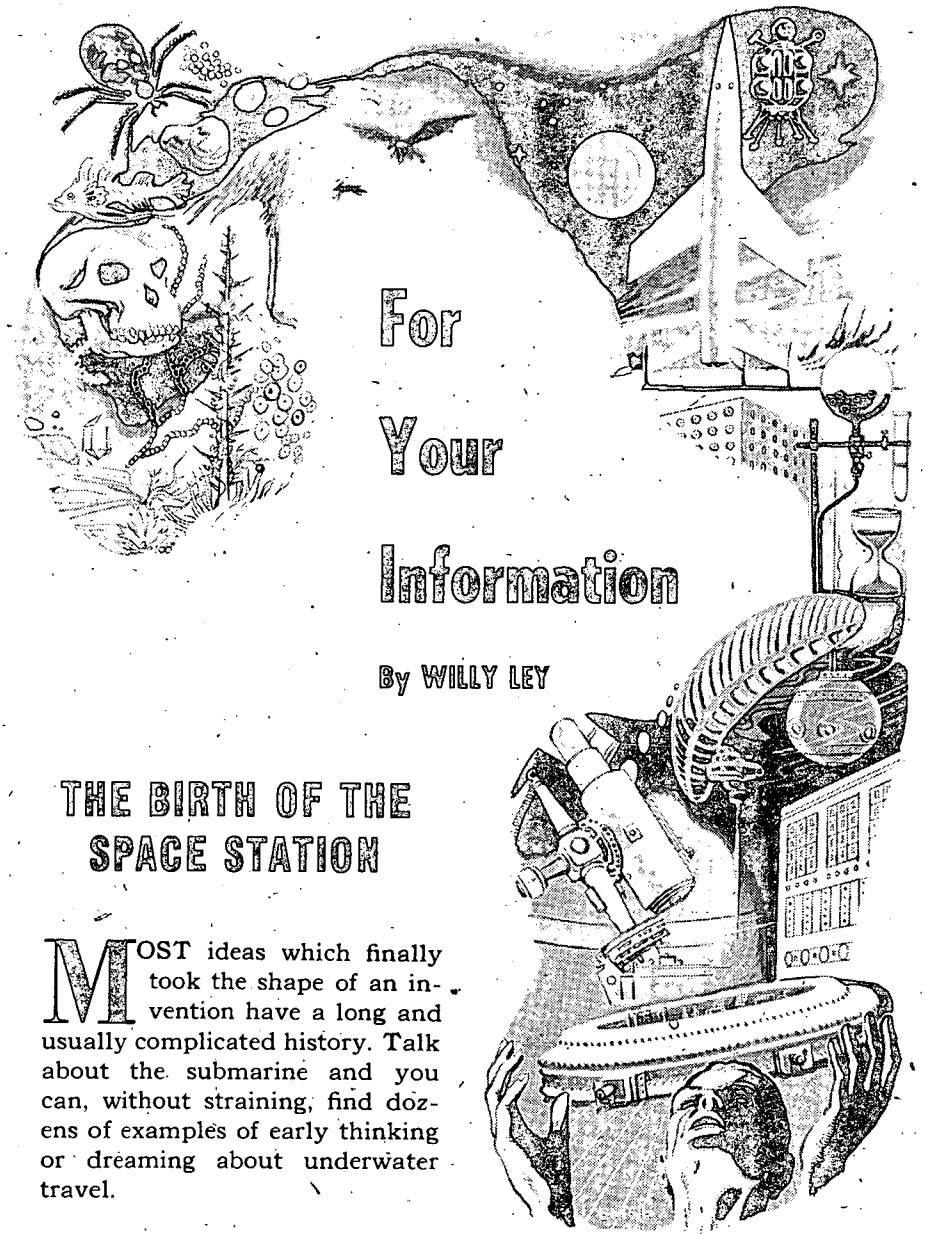
Leading next month's issue is an enchanting—*literally* enchanting—novella by James E. Gunn: WHEREVER YOU MAY BE. Since words like "enchanting" change meaning through misuse, let's keep in mind that it does not mean "darling" or "stunning" or any other Hollywoodism. The story is verbal, emotional and scientific witchery that will drag you into the action almost bodily . . . wherever you may be!

JUNKYARD by Clifford D. Simak sets you down on a fly-trap of a planet and challenges you to find your way off it again. Fuel isn't the problem, or wrecked equipment, or lack of complete and explicit directions. No, it's something else—junkyards just don't *like* to give up the things they accumulate.

Both these stories are long and strong and loaded with adrenalin, so there may not be room for another novelet. On the other hand, there may. We'll see how the isue makes up and cram in, as usual, all the material it can hold.

You can count on a full complement of short stories heavily armed with bright ideas, sharply drawn situations and ingenious solutions . . . plus our regular features (the editorial, for example, is guaranteed to produce both chuckles and snarls) . . . and, of course, Willy Ley's FOR YOUR INFORMATION, which continues the historically and scientifically important BIRTH OF THE SPACE STATION.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



For Your Information

By WILLY LEY

THE BIRTH OF THE SPACE STATION

MOST ideas which finally took the shape of an invention have a long and usually complicated history. Talk about the submarine and you can, without straining, find dozens of examples of early thinking or dreaming about underwater travel.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The amount of early material on flying is almost overwhelming.

Even such a relatively simple machine as the typewriter can boast a lot of background—I remember the amazement with which I read a publication of the Society of German Engineers (VDI) some twenty years ago, for which a diligent researcher had collected dozens of century-old typewriters. Not just reports, but pictures of them and even a number of originals. Moreover, he had covered only the German-speaking countries of Europe.

Small wonder that nobody ever succeeded in writing a complete and reliable *History of All Inventions,* although there are at least a dozen books which bear some such title.

However, there are exceptions. The "idea" of photography, prior to the first picture actually taken, seems to have been only a few years old. As for earlier prophecy, there is just one old French science fiction novel in which something resembling photography was forecast.

Another exception is the X-ray. It did not have any earlier "history" at all. Dr. Konrad Röntgen discovered X-rays almost accidentally, immediately realized their value for surgery—especially military and industrial surgery—and that was that. Later, some German doctor discovered an older book, dating back about a quarter-century prior to the actual discovery, in which the author writing under the heading of *Medical Fairy Tales* had said, "We'll make the patient as transparent as a jelly-fish," and this was duly noted as the only "prediction" of the X-ray.

THE concept of the space station is such an exception, too. While the idea of space travel has a two-thousand-year history, the idea of the space station has virtually none. It appeared for the first time in 1897 in Kurd Lasswitz' famous novel *On Two Planets,* and it was introduced as a technological concept in 1923 in Prof. Herman Oberth's first scientific work on space travel by means of liquid fuel rockets. There is nothing between these two dates which may be said to have contributed to the concept.

True, old Herman Ganswindt told me that he had thought of space stations around 1880, when he toyed with the idea of reaction-propelled ships. Even if he remembered his youthful ideas correctly after so many years, he had not influenced anybody. At any event, he could not show me any documentation to prove he had mentioned the idea in public.

Nor can I bring myself to consider a certain French science fic-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tion novel—now half a century old—as a contribution to the idea, even though the theme consisted in putting something in an orbit around the Earth a few thousand miles away.

This novel, *Séléné Cie,* was based upon the notion that people could save money ordinarily spent for the illumination of cities and roads if only the Moon were not 240,000 miles away, but circled the Earth at an altitude of 3000 or 4000 miles. (That it would spend a lot of time in the Earth's shadow when at such a short distance, which would eliminate it as a source of illumination, was nowhere mentioned.) The story relates that a mountain of pure iron is discovered in French Equatorial Africa which, wound with cables, makes an enormous and powerful magnet. Why this should pull the Moon closer is incomprehensible, but in the story it did. The outcome was less than satisfactory—the Moon wins and pulls the iron mountain clean out of the African soil.

The concept of the space station thus originated in just two places: first in a novel and then in a scientific book. It has to be mentioned, however, that Kurd Lasswitz, the author of the novel, was a scientist himself, specifically an astronomer and professor of mathematics. The space station he thought up for his novel is so unique that it has never been imitated by any other writer, simply because it would have been such an obvious imitation.

When Lasswitz wrote the book (during the years 1895-97), it was more or less generally accepted in astronomical circles that the planet Mars is inhabited by intelligent beings. Other theoretical reasoning had it that the planets were the older the farther they were from the Sun. Mars, as an older planet, had provided the proper conditions for the origin of life at an earlier date, so intelligent life had also appeared much earlier than here. Hence the intelligent Martians should be far ahead of us in every respect.

LASSWITZ drew from this the conclusion that, if space travel were possible at all, the Martians would come to us long before we could go to them. In order to explain the delay (for they might just as well have arrived during the reign of Nabopolassar of Babylon or of Augustus Caesar), Lasswitz made the problem of space travel appear much more difficult than it actually is. And he made the solution of the problem such that it could not be solved on Earth.

On Mars, he postulated, there is a substance which happens to be transparent as glass, but which has the far more important prop-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

erty that it can also be made "transparent" to gravity. Lasswitz got around a few important theoretical difficulties by saying that the energy of gravity did not appear as gravity in treated material, but "in other forms of energy."

He also was careful to point out that just as glass cannot be made *completely* transparent to light, this substance could not be made completely transparent to gravity, but only to a point where the still remaining weight did not matter any more. And finally he made it clear that the substance retained its inertia.

A takeoff from the planet, under these conditions, would then proceed as follows:

The ship, spherical in shape for structural reasons, would be made virtually gravity-free. Instead of following its planet around the Sun, it would continue in a straight line, a tangent to the orbit. After waiting long enough, the planet would have receded far enough so that its gravitational field hardly influenced the ship, even if susceptibility to gravity were restored. But the Sun would then influence the ship and, by diligent and precalculated maneuvering in the gravitational fields, the ship could go from one planet to another, in a tedious and dangerous voyage. (You can see where H. G. Wells got his idea for *cavorite* for his story *The First Men in the Moon.*) But then reaction propulsion is added to the ships and the safety of trips and the duration are improved enormously.

Still, a takeoff has to be made from the poles of the planet, where there is no rotation to interfere. It is still better not to take off from the surface at all, but from a space station. For Earth, this is an absolute necessity because the marvelous substance of the Martians happens to deteriorate in the presence of water vapor.

Hence the Martians first equip their planet and then the Earth with two space stations each, placed vertically over the poles; in each case, one planet-radius from the surface. Travelers come from a polar installation on the ground to the space stations by way of a specialized conveyance built for just this purpose, and then transfer to the true spaceships.

In appearance, the space stations resemble the planet Saturn sliced in half in the plane of its rings. There is a hemispherical main dome which has eight cutouts for the ships to berth in, with ring-shaped galleries around. The whole can be rotated around its vertical axis so that the station can be turned in such a manner that no part of its structure

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

will interfere with a departing or an incoming ship.

Of course, nothing that is not made of this substance from Mars could be made to stay in place without moving over one of the poles. But aside from this, you might have noticed the first appearance of a number of very "modern" ideas; for example, the need for a specialized vehicle, capable of penetrating the atmosphere, for the trip from the ground to the station, while the spaceships proper never enter an atmosphere and are, in fact, incapable of doing it.

NOW for the appearance of the space station concept in science. As has been mentioned, the idea was introduced by Professor Hermann Oberth in 1923 in the first edition of his book *Die Rakete zu den Planetenräumen* ("A Rocket into Interplanetary Space"). Even there it cropped up very much as an afterthought, on pages 86-88, which are the last pages of the last chapter.

In that last chapter, Prof. Oberth, after having investigated mathematically the characteristics of liquid fuel rockets and discussed possible design features, spoke about likely applications of large-size liquid fuel rockets. He had only two in mind at the time, one a high altitude research rocket — virtually what we now actually have with the rocket *Aerobee* — and one a man-carrying rocket ship for flights into space in the vicinity of Earth. Then he threw out a few estimates to indicate the general order of size which such rockets would have.

He estimated, for example, that a rocket ship for flights up to about 1000 miles with a pilot only would have a takeoff weight of 300 metric tons and that the rocket ship built for two men would need a takeoff weight of at least 400 metric tons. After that he started a new paragraph, writing (I am now translating from the original book):

"If we force such large-size rockets to circle the Earth, the rocket will behave like a small moon. Such rockets do not even have to be designed for landing. Contact between them and the Earth can be maintained by means of smaller rockets so that the large ones (let's call them observing stations) can be rebuilt in the orbit the better to suit their real purpose. If the continuing state of apparent weightlessness should have undesirable consequences, which, however, I doubt, one could connect two such rockets by wire ropes a few kilometers long and make them rotate around each other."

Here you have the whole concept in a few sentences: The rocket which stays in space and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

which is gradually changed around to such an extent that it cannot even land anymore; the smaller transport rockets; the idea of substituting centrifugal acceleration for gravity, if needed. Then he went on to outline a few possible uses:

"With their powerful instruments, they would be able to see fine detail on Earth and could communicate by means of mirrors reflecting sunlight. [Remember that this was written about 1921, when radio was very much in its infancy.—W.L.] This might be useful for communication with places on the ground which have no cable connections and which cannot be reached by electric waves. Since they, provided the sky is clear, could see a candle at night and the reflection from a hand mirror by day, provided only that they know where and when to look, they could maintain communications between expeditions and their homeland, colonies and their motherland, ships at sea, etc. . . .

"The strategic value is obvious especially in the case of war in areas of low population density; they might either belong to one of the two countries at war or sell their services at high rates to one of the combatants . . . The station [at this point the term "station" is used for the first time] would notice every iceberg and warn ships . . . the catastrophe of the *Titanic* in 1912 would have been avoided by such means."

AND then Oberth added another completely new idea which had not been voiced before anywhere.

"All this," he wrote, "amounts to practical advantages. But an even greater advantage could be gained in the following manner: one could spread a large circular wire net simply by rotating it around its center. Small plane metal mirrors could be fitted into the spaces between the wires and their position relative to the wire net could be controlled electrically from the station. The mirror as a whole should rotate around the Earth in a plane which forms a right angle with the plane of the Earth's orbit. The wire net would be inclined to the direction of the Sun's rays by 45°. By proper adjustment of the positions of the single facets, one could either concentrate the reflected sunlight on specific points of the ground or could diffuse it over large areas, or, if not needed, make the whole beam miss the Earth.

If, for example, the mirror is 1000 kilometers (600 miles) distant, the image of the Sun from each facet would have a diameter of 10 kilometers; if they are made

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to coincide, the energy would be concentrated in an area of 78 square kilometers. Since the mirror can have any size desired, it could have colossal effects. It would be possible, for example, to keep the shipping lane to Spitsbergen and the North Siberian ports ice-free by such concentrated sunlight.

If the diameter of the mirror is 100 kilometers, it could make large areas in the North habitable by means of diffused sunlight. In the middle latitudes, it could prevent sudden drops in temperature in Spring and Fall and save the fruit and vegetable crops of whole countries. It is especially important that the mirror is not stationary over any one point of Earth and is therefore capable of rendering all these services . . ."

After a discussion of the most suitable material for the mirror (Oberth believed sodium metal would be best), and the estimated costs (far too low), he continued:

"The observing station could also be a refueling station. If the hydrogen and oxygen [the fuels Oberth had in mind] are shielded against solar radiation, they'll keep for any length of time in the solid state. A rocket which is refueled at the station is no longer hampered by air resistance and not much by the Earth's gravitation . . . Furthermore, it no longer needs a high velocity of its own. In the first place, the potential of the Earth is lower at the distance of the station. In the second place, the rocket only needs to make up the difference between the required final velocity and the velocity of the station which is, in round figures, six kilometers per second.

If we now connect a large sphere of sodium metal which was assembled and filled with fuel in the station's orbit with a small solidly constructed rocket which pushes the "fuel sphere" ahead and draws its fuel from the sphere, we get a highly efficient apparatus which should be capable of flying to other planets."

Oberth's first book stopped at that point.

Then the concept of the station in space was adopted by others who added their own ideas. How the evolution of the space station progressed will be discussed here next month.

—WILLY LEY

ANY QUESTIONS?

I know of binaries and I know that there are triple systems of stars, two stars moving around each other and one of them a binary itself. Are there systems of more stars than three and, if so, are they stable?

Gloria Quinn

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

2122 *Miller St.*
(*city missing*)

If you had mentioned your city, you would have had your answer weeks ago. The answer is yes.

One of the examples which are easily found in the sky is the star *Zeta Ursae Majoris*, the middle star in the "handle" of the Big Dipper. It is, as you can easily see, a naked-eye binary. The Arabic name of the brighter star is *Mizar* and that of the faint companion is *Alkor;* the latter word is said to mean "little rider". It was Sir William Herschel who found that the larger of this pair was a binary, the two components of which are now known to swing around one another with a period of 1.83 years. Later it was found that the fainter star is a binary too, with a period of only four days. And the smaller binary moves around the common center of gravity with the bigger one in sixty years.

The most amazing collection of multiples of binaries can be found in the constellation which the ancients called *Gemini*, the Twins, because of the two bright stars Castor and Pollux. Both are not merely binaries but multiple systems. Seen with the naked eye, Castor looks like a single bright star but even a comparatively small telescope shows that it is a binary, the two components about 80 times farther away from each other than the earth is from the sun. Then it turned out that each one of these two white stars is a binary itself and a faint reddish star, not far away, was found to be a binary, too. So Castor consists of two white twins, with periods of three and nine days, respectively. The two pairs swing around their common center of gravity in 340 years. The faint red star, is, as mentioned, a twin too, with a period of about 19 hours. And the red twins move slowly around the system of the two bright twins. They haven't been under observation long enough to establish their period but it must be many thousands of years. —As to your second question: to the best of our knowledge these systems are stable.

I recently read in a local paper that a German clergyman had found a city in the sea off the German coast. He is said to have expressed his belief that he has found Plato's Atlantis. Do you have any opinion about this?

(*Name withheld*)
Lansing, Minn.

I haven't read this report even though I receive several German scientific periodicals. But I am quite certain that the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sunken city which the German clergyman found is *not* Plato's Atlantis—a remark which may have been added by the newspaperman who wrote the story. The mention of Atlantis, no matter who made it, is probably just a hangover from those days when every sunken city, or suspicion of a sunken city, was linked with the Platonic dialogues. It can be considered pretty well established by now that the "model" for Plato's Atlantis was the city of Tartessos, the Biblical Tarshish, in western Spain; the same city which served as the model for Homer's Scheria in the *Odyssey*.

On the other hand I feel reasonably sure that the German clergyman found something. Along the northern coast of Germany there are a number of remains of what looks like old roads which seem to lead straight into the sea. And there are also quite a number of local legends of remains of old cities and towns at the bottom of the sea, but generally close enough to present day land so that the land is still clearly in sight from the alleged locations of the old cities. The legends have a tendency to exaggerate, but most of them seem to be founded on some fact. Often these former cities—or better, townships—are generally referred to as "vinetas," which is supposed to be the name of the most famous of them.

Detail is awfully hard to ascertain. It seems that about a thousand years ago a number of old townships were abandoned because they had been established too close to the shore line. It is even possible that the sea level rose somewhat as a late result of the melting of Ice Age glaciers. At any event the finding of a sunken settlement off the German coast is not at all unlikely.

I may add a few words about the "city" of Vineta, the supposed name of which is sometimes used as a generic name. The former existence of that city is historically well-established; it existed during the tenth and eleventh centuries and had been built by a Slavonic people, the Venden or Wenden. But the original name of the city was Jumne, the version Vineta originated by way of Latinization on the part of later chroniclers. They first transliterated JUMNE as IVMNETA which soon came to be written VIMNETA and finally VINETA. Although nobody doubted its former existence, and historians were agreed that the sea finally conquered merely an abandoned city destroyed by war, there was no agree-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ment about where it originally stood. It was known that its inhabitants could reach it from the hinterland by travelling downstream on the Oder River, but that still left a comparatively large area where it could have been. Only a quarter century ago did historians succeed in finding a place which was in full agreement with all the sources. It happened to be quite near a small seashore resort which later became famous. Name of Peenemünde.

If there is a layer of hydrogen in the upper atmosphere, is there not danger that one day a rocket will be fired high enough to enter and explode this hydrogen layer?

Raymond Wilkes
Box 114
Greenfield, Missouri

The answer to that one is "no" and this answer can be backed up with a number of good reasons. In the first place the idea that there is a layer of pure hydrogen in the upper atmosphere (proposed originally by Svante Arrhenius) has been dropped. In the second place even if there were such a layer it would be enormously attenuated and should properly be called "a vacuum with occasional hydrogen atoms in it." But even if there were a layer of pure hydrogen (which there isn't) and even if it had a density comparable to that at sea level (which is impossible) it would still not be ignited by a rocket's exhaust blast. Igniting hydrogen means to start combustion which requires oxygen. Without oxygen the hydrogen could not explode and in a pure hydrogen layer there would, of course, be no oxygen. Finally, if there were such a layer and if enough oxygen were present too, the whole would have been ignited by meteorites millions of years ago.

When the distance from one planet to another is mentioned, do they measure from the center of one to center of the other or do they start measuring from the edge?

Loren Shaw
12605 S.E. Division
Portland 66, Oregon

All astronomical distances are center-to-center distances, not surface-to-surface distances. This is a fundamental rule but most of the time it would not matter much if surface-to-surface distance were used by somebody by mistake. In the case of Earth and Moon, the difference between center-to-center distance and surface-to-surface distance is just about 5000 miles. But the center-to-center distance varies itself,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

from a minimum of 221,460 miles to a maximum of 252,700 miles. In the case of Mars and Earth the difference becomes negligible, the difference between surface-to-surface and center-to-center distances is on the order of 6000 miles while the closest possible distance is 35 *million* miles.

How does the H-bomb work?
Frank Goodwyn, Jr.
9709 Lorain Avenue
Silver Spring, Md.

This question is a somewhat large order,—not even counting the fact that the classifications which are probably stamped on each and every document pertaining to the H-bomb are terrifying themselves. But since this question will probably come in from numerous readers I'll try to answer it to the best of my ability. Let's begin with the "old fashioned" A-bomb. This is a "fission bomb," which means that the atoms of uranium-235 or of plutonium break apart, into two pieces of about equal mass, releasing energy in the process. The H-bomb is known to be a "fusion bomb" in which hydrogen atoms are fused together into heavier atoms, presumably helium, a process which also releases energy. This fusion of hydrogen atoms is the process which keeps the sun and most of the other stars visible in the sky going. In our sun the process takes place in six successive stages which fuse four hydrogen atoms into one helium atom; a carbon atom is involved in this process which has been called the Solar Phoenix Reaction because that hydrogen atom which initiates the first step re-appears unchanged at the end of the sixth step so that it can start all over again.

The fusion process in the H-bomb is in all probability quite different from the Solar Phoenix Reaction. But it has to be mentioned first that there are three kinds of hydrogen atoms, of three different weights and the rarer the heavier they are. The first is ordinary hydrogen, the second, of double the weight, is "heavy hydrogen" or Deuterium. The third, of thrice the weight of ordinary hydrogen is called Tritium. Ordinarily two "deuterons" would not fuse into one helium atom and no "triton" would consider fusing with a "proton," the nucleus of the ordinary hydrogen atom. The nuclei, having like electric charges, would repel one another if they came too close. Only if they move very fast can the energy of movement overcome the repulsion. It is easy

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to make small material particles move fast, all one has to do is to apply heat and thermal motion will be the result. All this is not precisely new knowledge, the main difficulty was to find a sufficiently intensive heat source so that the thermal motion would be violent enough to do what it was supposed to do. But the heat required was such that even an electric arc was icy cold by comparison. Not even the surface of our sun is hot enough for this purpose, one had to go into stellar interiors to find places with the requisite number of degrees of temperature. Until the A-bomb came along. The A-bomb does produce enough heat, even if only for a fraction of a second. It is for this reason that it has been said that the A-bomb is the "fuze" or "starter" for the H-bomb. The hydrogen in the H-bomb is probably not ordinary hydrogen; it would be asking too much to expect four atoms to have a head-on collision at precisely the right instant. But one can expect two deuterons to collide, or a triton to collide with a proton. Presumably, then, the hydrogen part of the H-bomb is a mixture of all three isotopes of hydrogen. Obviously there must be an optimum mixture. Obviously this optimum mixture is Top-Top Secret, for good and sufficient reasons.

All this, of course, is valid only with the proviso that the H-bomb is actually based on the reasoning given.

WHAT'S YOUR PROBLEM?

Science has become so complex and confusing, even to scientists, that there must be *some* question you'd like Willy Ley to explain clearly, authoritatively and in everyday English.

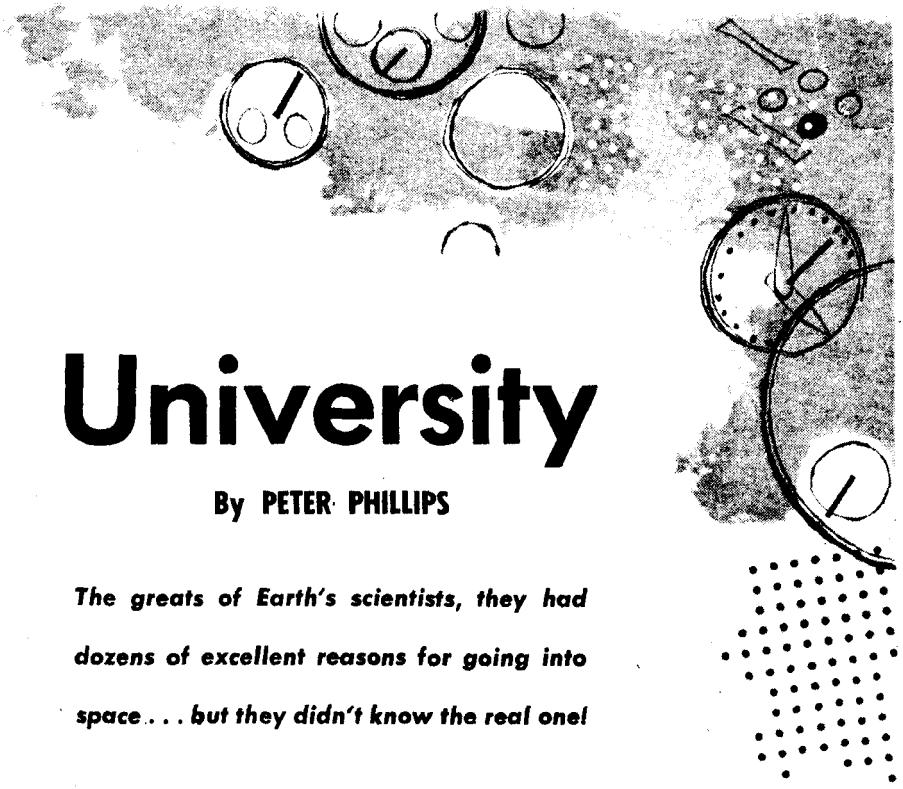
As you can see for yourself, he's an expert on clarification.

It should also be apparent that he is not a scientific snob—FOR YOUR INFORMATION is run for the benefit of laymen, not scientists—so there's no reason to be ashamed to ask *any* question in his field.

All we request is that you hold your questions down to one or two at a time (you can always send in more, later) and type or print legibly. Please add your name and address—we'll withhold them if you want us to—because there isn't room to answer all queries in the magazine and *every one of the others* is answered by mail.

Now . . . what was it you wanted to know?

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



University

By PETER PHILLIPS

The greats of Earth's scientists, they had dozens of excellent reasons for going into space . . . but they didn't know the real one!

Illustrated by ASHMAN

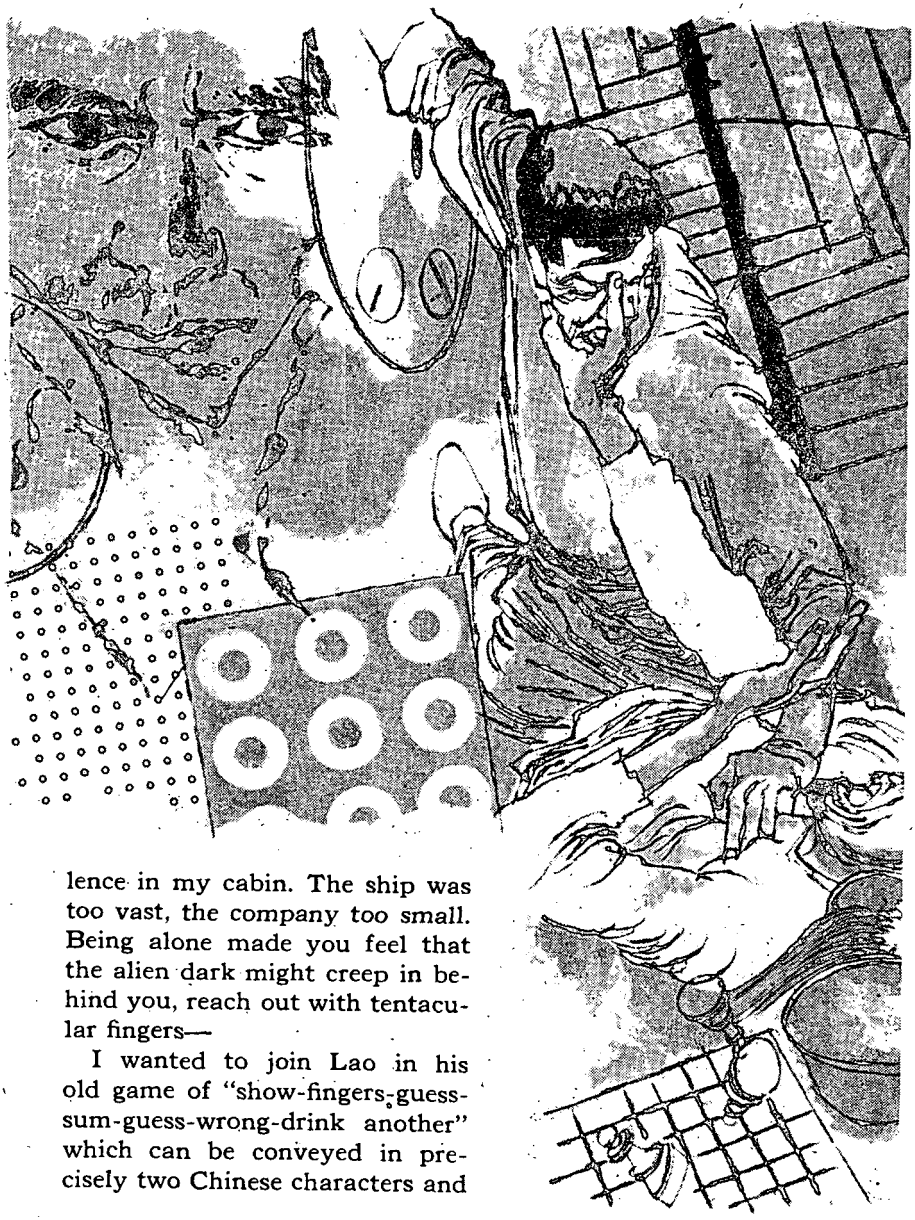
Put six small drunken ants in a twenty-gallon oil drum and heave it into space somewhere between Earth and Mars—

I SCRUBBED the tape and started over again. The space concept wasn't to scale, anyway. Six bacteria in a seed-spore might be nearer the mark. I had to convey space, time and place in a fashion that the lay public could grasp when and if we boomeranged home.

It was difficult — impossible, perhaps—and not made easier by the noise. M'Bassi had improvised a bongo drum from an upturned wastebasket and Brocuzynski was trying to scramble onto the desk to do a step-dance.

Yet I didn't wish to seek si-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



lence in my cabin. The ship was too vast, the company too small. Being alone made you feel that the alien dark might creep in behind you, reach out with tentacular fingers—

I wanted to join Lao in his old game of "show-fingers-guess-sum-guess-wrong-drink another" which can be conveyed in precisely two Chinese characters and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is perhaps the most ancient of all drinking games.

But I stayed at the transcriber trying to think back, getting memories lined up to explain just why, in this instant of mankind's greatest adventure, it was necessary for these pioneers to be as soaked in alcohol as a sextet of brandied peaches.

Necessary? Of course. Sam had given the instructions and impressioning long ago—

That phrase seeped up from my subconscious. It seemed to mean something, but when I tried to pin it down for analysis, its sense-structure disappeared like a pellet of frozen CO_2 in a hot hand. It left me with a feeling of estrangement from the others, the seventh ant in the oil drum—the odd ant out.

That's how I'd felt earlier when these six had been at each others' throats instead of around each others' necks.

Six babies. Six damned, squalling selfish babies. Six bouncing, babbling, but far from bonny babies.

Five months ago, on Mars, they had been responsible, well-integrated men, the pick of the nations, esteemed beyond the borders of their own countries.

The trouble started a "month" after the *Boomerang*'s strange drive had reduced a whole hemisphere of that dead planet to glassy aridity and flicked us out of the Solar System.

FIRST blowup came between Aventos and Brodcuzynski. Chessmen were scattered over the messroom floor. When I told them to quit behaving like kids, Aventos turned his sneer on me.

"Listen to All-Nations Boy! Get back to your diary, sonny. Sold it in advance, haven't you? The only one who's making money out of this crazy trip. That is, if we ever do return."

I went back to my desk. I tried never to argue, only to pacify. It became increasingly difficult to sting any of them into the realization that they were mature men of science, not fretful schoolkids on a too-long picnic jaunt.

We couldn't stay alone in our cabins and we couldn't stay together in the messroom. That's what it came to.

And we couldn't wander alone in the empty, echoing gangways and corridors of the mile-long ship. That was the quickest way to go psychotic.

Borg sparked the next eruption. The mystery outside had touched some vein of poetry in his Scandinavian soul. He stood by the vision screen one "day" and started quoting aloud. Very

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

loud—clear and ringing.

It may have been his own stuff or a translation of one of the Sagas:

"The sea-devils thunder and mock our ears
With cries of women and blinded children;
But we must keep our eyes on the prow
Where stands Erik the Hairless One
Defying the sea-mountains.
Our lips are sealed with ice—"

Braithewaite let out a howl like a factory hooter: "Shut up you damned Dane! I'm trying to read!"

"Then go to your cabin. You don't appreciate good poetry, you clod of a Yorkshireman."

I managed to grab Braithewaite before he made a suicidal rush at the Borg, who was big and strong enough to club him to death with a single fist.

M'Bassi managed to keep out of quarrels, but his genial face turned to immobile ebony and reduced his normally fluent conversation to the grunted basics of his original tongue. And disdain and cold withdrawal crept into the eyes of Lao T'Sun.

Me? All-Nations Boy, they called me, in good-humor at first, then mockingly and with raw resentment. They were all degreed men. I was a mere publicist, appointed official chronicler by fortuitous virtue of thoroughly mixed racial descent, abrogation of all nationality allegiances and world-citizen status.

When instability affected these most stable of men, I became unofficial arbiter. Not a leader. There could be no leaders on this trip.

THE ship was semi-automatic, crewless, photonically set to snap into normal space within planetary observation distance of a sun, and then return.

A captain, despite all possible screening, might be partisan. He might attempt to land if a suitable planet were seen and claim it —and the *Boomerang* — for his own nation, with accidents arranged for those of the crew who protested.

So there was no crew.

The *Boomerang* couldn't have been built by any single nation. It taxed the resources of the entire Earth. And the federal Earth government had made sure it would return as a federal ship—if it returned.

The luminous dust that now ringed the Earth to mark the orbit of the vanished Moon was a reminder that no single nation could ever again be allowed to make an extraterrestrial conquest.

Federal government, imposed and maintained by mutual fear of a war that might reduce Earth itself to the same dust, hadn't

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

diminished nationalistic rivalries in all spheres. Healthy economic and cultural competition remained, but under extremely tight control.

Now, if never before, I could see why. We're still children. Proof enough of that in the squabbles after the *Boomerang* had been built, when the "proportional representation" howl went up. It was howled down, and the decision was made that basic racial groupings and not states should be represented, on a geopolitical basis.

Yet these six under the strain of flight had become a microcosm of the still-divided world.

But they were powerless to do more than quarrel. We were still under the aegis of the government which set and sealed us aboard this fabulous craft to go, observe, return and report. Our destiny was still in the hands of men back in the Solar System, as surely as though those hands were propelling us.

Perhaps it was that knowledge of complete helplessness that was partly responsible for the psychological crackup. These men were theoreticians. None could assume control of the vessel. Only two—Aventos and Lao—had a full mathematical grasp of the space-strain theory on which the propulsion unit was based. But neither would know what to do with a spanner if you put one in their hands.

Except crack each other over the head with it.

That's what nearly happened. Middle-aged men might taunt, decry, jibe, revert to childishness in these circumstances, but I figured their whole conditioning would prevent actual personal violence.

Then I had to hold Braithewaite back. And not long after that episode, Lao T'Sung, oldest and wisest among us, staggered against my desk and slumped near my feet.

Brodcuzynski looked at his grazed knuckles. "I must be insane," he muttered. He seemed even more shocked than Lao, who sat up and rubbed a bruised chin.

For a moment, I thought the cosmologist would burst into tears of remorse. Instead, he helped the sixty-year-old mathematician to his feet.

"T'Sung, I could cut off my fist," he said awkwardly. "Something snapped in my head. How can I apologize—"

Lao T'Sung took both hands of the man who'd just struck him and said: "I'm more surprised than hurt. Better to forgive yourself, Brod, than need my forgiveness."

And Brodcuzynski snatched his wrists away and shouted: "For God's sake, don't be magnani-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

mous! Let me be sorry my own way!"

I GOT up from my desk. "It was a lousy trick, Brod."

"Don't I know it? Here, take a smack." He jutted out his unshaven chin. "Go on, take a poke at me. But don't preach!"

Lao made graceful, deprecatory motions with his slender yellowy hands.

"Lao, you've said I had wisdom beyond my years. Isn't it time we applied everybody's wisdom to the present problem?"

Lao looked at me. "I refer that to the man who's just demonstrated that problem. What's your opinion, Brod?"

Brodcuzynski worriedly passed the buck to M'Bassi. "You're the psychologist. Why did I knock Lao down? What's got into us?"

M'Bassi was determinedly engaging himself with a stereostrip projection of the World Games. He lifted his eyebrows.

"You heard," I said.

"Just ignoring what I can't control." He unrolled his lanky black length from a sit-easy. He was wearing only a pair of linen shorts. "I could happily knock all your silly heads together—knowing that my own head needs an equally powerful jolt. My neural paths are cross-circuiting into a neurosis cycle. We're affected by something beyond our immediate understanding. Something beyond human experience. Out there."

He nodded toward the dull jet of the vision screen. It was lifeless except for the blue-white patch of the Galaxy we were both leaving and approaching — and existing in.

"Within our own solar system, our minds are safe. The distances and speeds involved in transit are directly comprehensible. But our present velocity and mode of propulsion are beyond either direct or intuitive conception.

"In effect, we're in an alien universe. But our minds, trained to perceive and correlate, are instinctively trying to grasp the unknowable. That way, conflict is sown in the unconscious."

"But men have made such journeys in the imagination," Lao protested, "and the imagination is a function of the higher centers. Our friend Statlen—" he waved at me—"has a drawerful of photostats of ancient magazines in which the concept of interstellar travel is taken for granted."

M'Bassi tried to smile.

Once, Sam had a similar strained smile on his face, before he gave me the impressioning. The whole project was h'gliegn—fun, playing with kids—but I must forget that and behave like

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a child . . . Who was Sam? A fleeting mental picture, half-dream—

"Imagination," M'Bassi said, "can withdraw from the extrapolation of its own functioning. But our minds are experiencing the unknowable. We can't withdraw. Our destiny isn't in our own hands. And there lies another conflict. Part of our minds is back home, grasping the familiar referents. The other part is here."

M'Bassi was sitting on the ledge in front of the vision screen. Brodcuzynski sat up there beside him, blocking the incredible scene.

"The end result?" Brod asked.

"Increasing xenophobia," M'Bassi said. "The unconscious is fighting to retain its integrity against the impossible demands of the higher centers." He took a cigarette from the pocket of his shorts. "Neurosis begins. Finally, unless the conflict is sublimated or resolved—"

He held up the cigarette, tensed his fingers. We watched the flimsy thing intently. It broke under the strain. He tossed the halves to the messroom floor.

LAO, after the silence, asked: "Why isn't Statlen affected to the same extent as the rest of us?"

"Young, resilient mind. And with all respect to our youthful friend, it's because his brain isn't highly trained in scientific method. The more you know, the more you know you don't know."

I said: "Thanks. Are you suggesting they should have sent a bunch of morons? Anyway, how about Borg? He may act a little crazy, but he hasn't shown any homicidal tendencies. Let him alone and he'll spout poetry all day quite happily."

"It's hard to believe you're all such innocents or so unobservant." M'Bassi grinned fleetingly. "Have you smelled Borg's breath? He carries it well, but he's been drunk for days. He's stultified his higher centers with alcohol."

Borg was gently snoring in a chair.

"Why hasn't he mentioned it, shared it around?"

M'Bassi shrugged. "We've hardly been on companionable terms lately. He may be ashamed of his secret tippling. And he may not have much of a hoard."

"Would it work?"

"Eventually it would have the same depressant effect as a barbiturate."

Aventos said: "I disagree. Depends on the individual."

"Wake Borg," I said. "I'd rather ride with a bunch of drunks than a homicidal gang of schizophrenics."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Lao was startled. "My dear Statlen, have some respect for your elders. Do you propose to feed us alcohol as you'd feed a baby soothing syrup?"

M'Bassi waved an expressive pink-palmed hand at the group. "Babies," he said. "I prescribe it. We must try something, and do it soon. The only alternative is narcotics from the first-aid, in large doses. If there's enough to go around, we'd become raging addicts."

"We don't know if there's enough alcohol," Braithewaite pointed out. "Borg couldn't have secreted much."

I shook Borg's shoulders roughly. His head lolled over and he opened red-veined eyes.

"Where is it? Where do you keep your liquor?"

He smiled feebly. "Wouldn't you like to know, son? Go away."

"How much have you got cached? We feel like a drink ourselves."

He sat up and looked around blearily. "That's different. I figured you were all blue noses because I was the only one who brought any aboard. I finished that way back, but I got plenty more. Plenty. More'n you could drink in a year of pub-crawling."

Of course there was plenty. That was arranged by Sam long ago. No mass expedition, no moronic minds, but a few of the best—with their higher centers temporarily dulled.

BORG weaved out of the door with drunken benevolent gestures to us to follow.

I had the crazy idea he might be distilling it. That was just possible, using ration fruit bars. Where? Practically any place away from our quarters. We weren't cramped for space. The *Boomerang* was a rabbit-warren. It wouldn't have been overmanned with a crew of a few hundred, and there were only seven of us.

The machinery installed to replace crew—rob-mechs of fantastic omniscience, competence and cost—occupied only fractional space. A full-scale distillery could have been set up somewhere in the miles of convoluted steel guts of the ship.

She'd been started as a generation-to-generation vessel. An entire self-contained colonizing community was to have boarded her, with the hope that their great-great-great-grandchildren would get to some star on straight atomic drive.

That might have been better. Time and a common, recognized destiny would have welded them into racial and political homogeneity. But when the new drive was discovered, it was cheaper to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

install it in this vast, near-empty hull than build another. The drive disregarded mass, could move or "translate" a mountain as easily as a molehill.

Still, the *Boomerang* could be carrying hundreds instead of a mere seven political and scientific guinea pigs.

Six guinea pigs—and yourself, Statlen, said a timeless whisper.

I stumbled on M'Bassi's heels as we filed into yet another empty, echoing corridor. He half-turned with a forgiving grin.

"This calls for fullest exercise of your descriptive powers, Statlen. Here we are, seven mature representatives of a race that's reaching out for the Universe, and we're running away from our own presumption. Running away from the stars—in search of a drink."

Aventos, just behind me, said quietly and without blasphemy: ". . . and on the sixth day, God took time off from Creation to slip into the nearest saloon for a shot of rye."

Lao T'Sung said: "You think we're playing at being God?"

"We're playing at being men. At the moment we all want to go home to Mother. We think we're grown up, making our way in the world. But we're still tied to her apron strings."

M'Bassi's voice boomed back in the corridor. "Mother Earth, eh? A startlingly fresh application of the ancient Jungian psychology."

Borg stopped in front of a red-painted sliding door, fumbled with a complicated catch. "Open Sesame!"

Cans were stacked in clamped piles inside.

"The *Boomerang*," said Borg, "is a complete ship. The emergency chemical jets may never have to be used. If they are, there's sufficient for five minute's blasting in the tanks. And if that's not enough, here's a reserve."

Brodcuzynski looked at the symbols on the cans and uttered a few wondering cusswords. "Look what that Dane's been drinking! Don't anyone give Borg a cigarette or he'll jet off clean out of his boots."

"Not neat, of course," Borg agreed. "Recipe is one-third absolute, one-third water, one-third fruit juice. No fusel oils or other rotgut products after distillation. Just plain, pure ethyl alcohol. It makes terrific cocktails. I've tried it with lemon, bay leaves, tomato ketchup, aniseed and milk so far. It curdles the milk. But let's experiment."

THAT had been four hours ago, ship time.

The pickling process with men obviously unused to alcohol had

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

been rapid. And they weren't in prime physical condition, though you wouldn't guess it, looking at the exertions of Brodcuzynski and M'Bassi.

Their reactions were slowed, high centers dulled.

Nicely timed. In about an hour according to the clock in my mind—the only possible measurement in this case—they would be in the passive stage, quietly happy or maybe maudlin, according to temperament. And receptive.

Receptive to what?

M'Bassi quit his thumping, came over to my desk and grabbed the edge to steady himself. "You don' look too good, son. What's troublin' you?"

"Wish I knew," I said, and meant it. I rubbed the back of my head. "There's something ticking away here, and the ticks are getting closer together."

He laughed. "Sonarscope, maybe. Or that's an egg and you've got something hatching inside there waitin' to bust out. Don't worry, boy. Have some more snake-milk."

I shot the drink down with a grimace. But the ticking went on, irritating, irregular, quickening, like a geiger counter approaching a radioactive source.

Within the hour it had become a continuous susurration.

A few seconds after the alarm signal vibrated through the messroom, it stopped abruptly.

The observation screen flared white and blank, pseudo-gravity ceased with the cutting of the drive-field, and the simple instruments rimming the screen showed the impossible: zero readings all around.

The *Boomerang* was at rest.

I saw the necessity for the relaxing alcohol now.

Two billion tons of metal being translated at more-than-light velocity can't come to a dead stop.

But it had.

And alcohol cushioned the mind against that fact. And against other things.

"Pink elephants!" Aventos breathed. He turned a slow cartwheel in front of the screen and solemnly regarded the dials upside down. "I don't believe it."

Braithewaite pointed to the thing that was growing slowly in the middle of the messroom. "Thass not pink," he said carefully, "and it's not an ephelant."

Sam stabilized himself at half his full size and looked around. He saw me and smiled.

"Having fun?" he asked vocally in English.

I'd waited four thousand years for that trigger. Now I remembered.

"Nice body," Sam approved. "Can you still semblize?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Give me time," I said. "It's been quite a while."

"We'll shift the whole heap down to the—what's the word?"

"Campus," I supplied.

"—campus, and give these good gentlemen a little gravity before they lose their last meal."

AT the farther end of the Hall, the statue of Athena hadn't changed since I last saw it. The Eternal Light still burned as brightly from the alabaster of that vast, high forehead. Not surprising, considering it had a half-life of two million years.

I gave her a perfunctory nod and half a wink. We revere wisdom, not its symbols. But she impresses the customers.

Sam, to me, direct: *No Greek? English universal tongue now. Barbaric.*

You get it?

In clear. Help out with odd term.

Vocally, to the six: "Gentlemen, as—"

President.

"—president of this establishment, I welcome you and trust that your stay will be pleasant. Mr. Statlen will continue to act as your mentor and guide and I shall be available at any time if you wish for any further information and—"

Enlightenment.

Filthy concatenation of syllables, that. Don't like."

"—enlightenment."

"If this be Valhalla, I recogize no gods," muttered Borg suddenly. I thought it was a misplaced sense of the dramatic until I realized he was quoting. He strode forward and poked at Sam's shoulder.

"I'm all here," Sam said politely.

"That's more than I am, mister."

"And my name isn't—"

Bearded mythological gatekeeper?

St. Peter.

"—isn't St. Peter. I realize you must be upset and confused by the suddenness of this arisement, but we find it psychologically unwise to allow reason to intervene by doing things more gradually."

"Upset?" Braithewaite laughed shortly. "That's the ultimate understatement."

THEY were sobering up fast, but alcohol still put a protective haze over their higher faculties.

"If it's real," M'Bassi said, "I'm due for a galaxy-size hangover."

"Where are we?" asked Lao bluntly. Drinking rice wine in his youth had given him a hard and intensely practical head.

"A planet," Sam replied.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Impossible. Our retranslation into the normal continuum could not have taken place so near planetary mass."

"So near? You were a light-month distant when our field encompassed you."

"Stopped us and brought us here within ten minutes?"

"An arbitrary measure of time."

"What system is this?"

"One far removed from your own."

"Our range was five light-years. Centaurus—"

"Your range was far greater than you were permitted to imagine. Even had it been less, you would have been brought within the aegis of this establishment. And now, gentlemen, please allow Mr. Statlen to conduct you to your quarters. Time for questions and work after you've rested."

SAM abruptly semblized himself elsewhere and left me to face the growing storm.

I'm afraid Aventos was the first to display terrestrial chauvenism and a lamentable lack of intellectual discipline.

"I suppose you can vanish like that, you bloody spy?"

I laughed at the use of the term. "I've nearly forgotten, but I'll be getting into practice again. The word 'spy' implies conflict. There's no conflict here. You're safe and you'll be made comfortable."

Brodcuzynski spoke for the first time. Despite his silvered hair, he was the youngest in heart. He was still happy-drunk. He had wandered away to study the decorated wall panels. He'd even spoken to a student scurrying through the Hall to look at the *Boomerang*. She smiled, psyched him quickly, gave his head a benedictory pat, and hurried on to join her quietly amused colleagues in the doorway. None of them had paused to look at our group.

Brod rejoined us. "Nice place," he said. "Coeducational, too. Um-um. Don't tell my wife."

Thank Athena for Brod at that moment.

The temporary easing of suspicion gave me time to usher them to their adjoining rooms.

"Take a nap, freshen up, then we'll eat," I said.

Aventos sat on the edge of his couch. His normally olive face was pale. "Where is it?"

"Out along the corridor to the left. Marked with an unmistakable symbol."

"We're not prisoners?"

"Go where you like, Juan. But I'd advise you to rest."

He put his head in his hands and looked sick and miserable.

When I reported to Sam later, he was giving instructions for

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the *Boomerang* to be parked elsewhere.

Direct: "Litters up the place. What a ship! A power hammer to crack a nut. Initially a colonizer?"

"Yes."

"You did well, Stat."

"No thanks to me. Does conditioning take everything into account, every conceivable deviation?"

"No. You automatically apply correction."

"Interference?"

"Of course not. Unconscious participation to a worthy end. Do you recall no example?"

I thought back. "A statesman-thinker, Francis Bacon . . . Yes, I started trend."

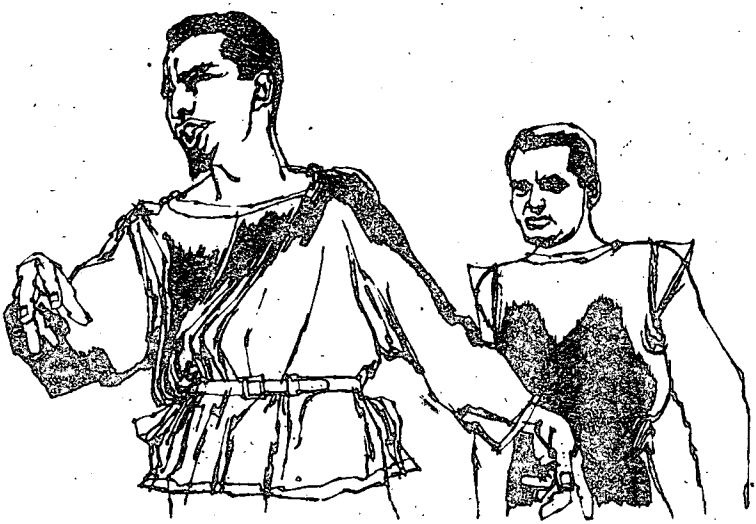
"Completed?"

"No. Still mind-matter bifurcation."

Sam: "Obvious, from that ungainly hulk of metal. Will they get through?"

Doubt. Hope. "I like them."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Sam, *amusement*: "They don't like you. They'll like you less afterward. Tough job."

Myself, *deprecation concept*: "Would be, if I were conscious of performing it."

"Return if necessary?"

"Certainly. Was writing imaginative fiction. Helps a little, I believe."

THE six were observed during their unrestrained wanderings. I took part and scanned them myself during one particular sleep-period, the greater part of which they spent in Lao T'Sung's room, framing questions. Aventos called it a "council of war."

On the following day-start, I took them to Assembly in the Hall. Despite exercise therapy, they still showed signs of mental wear and physical dissipation. But Brodcuzynski was still irrepressible.

He looked at a group of students from Mizra III, tall, uni-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

formly blonde, in purple gowns. "Magnificent!"

M'Bassi surprised me. "Don't fool yourself, Brod. They probably regard you as a mentally retarded savage from a cesspool planet."

"That came hard, didn't it, M'Bassi?" I asked quietly.

"It's obvious. The only possible conclusion to fit the facts. The others don't agree, but—" He shrugged his massive black shoulders. "My branch of the race suffered imposed inferiority for so long that my ego isn't outraged by the assumption, unlike Juan Aventos and Lao T'Sung, who seem to be taking the dignity of the entire race on their shoulders."

True dignity can never be pathetic, even when it lacks substance for its assertion.

But I smiled within when Lao marched up to the rostrum beneath the representation of Athena and raised his voice to Sam: "Let's stop this farce! Why are we here? Where is this place? What is the purpose of this gathering? If this is some form of religious ceremony—"

A vocal buzz of surprise arose from the students as they put out psych-prongs to Lao and grasped —or failed to grasp—his meaning.

Even though he knew it was coming, Sam was a little embarrassed. There had been few such interruptions during the million years of his presidency.

"I regretful—" Sam began.

Word, quickly. That's incorrect.

Just say you're sorry.

"I'm sorry you should chose this moment to question me, Mr. Lao. I have told you that you have access to me at any time. And this is not religion. I can see your concept dimly. You are not—"

Sam fumbled impatiently in my mind. *Abrogating,* I told him. *It's a soothing vocalization.*

"—abrogating one whit of your particular individual or racial superstition—"

Attention, Sam. That's wrong. Use belief.

"—beliefs by attending this little ceremony. We are merely dedicating the new day to a chase of knowing."

Sam plucked the words from me before I could indicate correct usage, and tried metaphor in an unknown tongue — a very chancy business.

Pursuit of wisdom.

Doesn't matter. He gets the idea.

Lao did. He returned to our group, sat in hard-faced silence until the brief business was finished, students had dispersed and seats which were not being used had sunk again into the floor.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

When Sam came up to us, gray-haired old Braithewaite chuckled at a sudden recollection.

"In walk and general demeanor," he said, "you might be the twin brother of my tutor at Oxford."

A classical university.

Sam grinned back. "I take that as a compliment. You were a student of Greek?"

"A poor one."

"But you recognize our emblem?"

"I've seen similar representations of Athena, allegoricized as a symbol of wisdom.'

"A WHIM on the part of our first expedition. They brought her back some four thousand of your years ago. She replaced an earlier symbol from another solar system, and has remained our favorite since, although we have a choice of five hundred or more similar symbols from the mythologies of other planets. Our second expedition placed Mr. Statlen among you."

"Are we to believe he's as old as that?" Aventos demanded, looking at me with bleak-eyed suspicion.

Reply, Stat.

"In effect, considerably older," I said. "But until yesterday, I had no memories beyond those of the thirty-odd years I've spent in this particular body; and I didn't know that I was anything other than what I seemed."

"The essence of what is loosely called mind or ego was, in Mr. Statlen's case, rendered transferable," Sam explained. "The faculty was unconscious, together with memories of its endowment and its eventual purposes. The awareness of an observer becomes a factor in his observations, so awareness was suppressed.

"When intervention of a kind at last became necessary, Mr. Statlen became the unconscious transmitter of certain impulses which subtly influenced the course of events.

"A devious method of achieving our ends, but a more direct means would defeat our purpose."

"And what is that purpose?" Aventos asked.

"To ascertain without its knowledge whether a race has achieved a degree of civilization commensurate with its material and scientific advancement. Civilization lies in the hearts and minds of men, not in their works. You've developed interstellar travel, but are you fit to use it? Are you fit to—graduate?"

M'Bassi widened his broad nostrils. "If Statlen's the boss-boy and he's been around so long, why not ask him?"

"Neither Mr. Statlen nor his

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

innumerable colleagues are able to communicate with us, or we with them. That would negate the non-intervention principle. Their sole task—mainly unconscious—is to insure that suitable representatives of an aspiring race are brought here for examination when they develop an interstellar drive."

"And suppose they don't make the grade?"

"What happens under your own curiously varied education system if a student fails an entrance examination? We can't press the analogy too close, but doesn't he return to junior or public or elementary school?"

Aventos stepped closer. "Quit dodging. You say all this is done without the knowledge of the race. But we've been brought here. So we know. So what happens to us and our ship?"

Aventos' death-fear was almost a physical pain in Sam's mind and mine.

SAM gave him a quick soothe-probe. "You are sent back," he said gently. "Your memories of this period are erased and replaced by the conviction that your expedition has failed, that your ship did not emerge at all from its probability state into the normal continuum.

"You will have been nowhere, seen nothing. Your drive will be altered to put you on a false and infinitely complex mathematical trail. This, and the vast cost of experimentation, together with subtly hindering influences unconsciously transmitted by the mentor delegated to your planet, will guarantee that no further major attempts are made for several centuries."

Sam was becoming positively pedantic in his use of this new language.

Direct: *more to this tongue than I suspected. Good flowing periods possible.*

Borg, who'd been standing quietly enough, fingering his fair beard and gazing at Athena, said suddenly in his deep bull voice: "By what right do you arrogate these powers to yourselves, whatever you may be?"

"The simple right of exclusion, which has no moral, ethical or legal basis, but is applied as a matter of common sense. Statlen informs me you are a professor of comparative philology at Harvard University.

"Suppose a five-year-old child from a village school demanded the right to enter your classes, sit in on your lectures, avail himself of your library. You wouldn't even question whether he'd benefit. You'd take him firmly by the ear, lead him outside, tell him to come back when he'd gone through the grades and high

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

school and college, or however you term the progressive units in your educational system.

"Even if he protested that, despite his behavior in fighting other kids and breaking your windows with his slingshot, he was really quite grown up and a hidden genius and fascinated by comparative philology, would you take his word for it?"

"A fantastic and degrading analogy," Lao said coldly. "You can't equate a race with an individual in such an incredibly cavalier manner."

"But we can and do," said Sam.

HE had endowed himself with the physiognomy of an ancient Roman emperor for the benefit of the six. He rubbed the high-bridged nose as he spoke. "By our standards, you are a young race. You may have advanced sufficiently to be permitted at least to study here. That is what we must ascertain.

"As I indicated, the empathy index weighs more heavily with us than the intelligence quotient. I understand that your mental and physical sciences are still largely divided. That doesn't promise well for you.

"Until a race achieves a synthesis, an integrated system recognizing the indivisibility of mind-matter concepts, its natural chauvinism cannot be sublimated. It remains the child of conflict.

"That attitude is useful, even necessary, in the infancy of the race, when survival is the only criterion. But if the race carries that attitude into maturity, it becomes dangerous to itself—and, unfortunately, to others, because its intransigeance is implemented by the weapons of material maturity.

"We don't claim to know the purpose of the Universe, except, perhaps, that its purpose is to divine its own purpose. But we do know that fire and the sword are not the tools for that fundamental research."

Stand by, Stat. Test coming. Psych all six and cross-check with me.

In clear. Hold Brodcuzynski or trauma possible.

Brod was still thinking in a vague and delightfully pagan way about the Mizra people.

Sam resumed his vocalizing to the six: "You find this difficult to grasp. A demonstration is more effective than many words."

Sam, direct to A'hig Onefour, who was standing by the right hand of Athena watching the six Terrestrials in amused fascination: *Come.*

One of the tall, blonde Mizra students who was standing by the right hand of Athena came across Hall toward our group. She halt-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ed, smiling, within the half-circle we formed.

In Earth terms: Aphrodite new-risen from caressing, milky-crested waves, an Amazonian Helen, a brazen Psyche, a Pompadour in free-limbed sports rig, a sexed angel, an aggregation of impossible but somehow attainable desire, a nymph rampant, a summation of sensuality, a positive aura of concupiscence—

A'hig Onefour played the part well.

Brodcuzynski: *My God, what a cookie!*

Braithewaite: *Sylvia—what is she that all her swains commend her; holy fair and wise is she . . . A million ships by such a Helen!*

Borg: *Ericka, who tasted blood from the bronze sword of her master and went red-lipped to eternal battle . . . Freyka, beloved of strong gods.*

Aventos: *Northern provinces of Spain and Italy produce such blonde, long-limbed wonders . . . Never cold.*

M'Bassi: *The uprightness of breasts . . . Mind high clear efficient . . . Couch, consulting room . . . Hell, she'd analyze me . . . Censor.*

Lao T'Sung: *By any human esthetic standards, East or West . . . Or equatorial . . . How is it possible? . . . Surely parallel development of humanoid type imposed by conditions of initial*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

formation? Fail to see. . .

Sam, vocally, and direct to A'hig: "Would you please resume your natural form, Miss A'hig relinquishing that which you and your colleagues adopted for the mental convenience of these gentlemen?"

Badly put, Sam. Gross connotation.

Doesn't matter. Psych them. I'm holding Brod together.

And the blonde, the leggy blonde, the luscious blonde, became in slow dissolve—

—using transliterated universal terms—

—a multi-sexed, commendably developed brachialiferous thase, with its fifteen specialized arms in display position, including the electropod, biometric analyzer, spectroscope, ultra-mike, aware-life-organized-mating-prong, radiation counter, semblizer, vibration-mathematic-entertainment-preen, quaint-psych-see-thing, genetic regularizer, telekinetic control—

All stemmed from an acceptably odd oblate spheroid; a sweetly esthetic organization of functional necessity. Its very truth-in-purpose was beautiful . . . This language is so limited in its conceptual terminology.

The psychic storm from the others nearly overwhelmed me, smashing like the ravening tumble of a cloudburst.

I WAS sick, bedeviled, racked by fear, shaken by hate, until Sam put out a calming thought.

You're identifying yourself, Stat. Come away, Help me psych and tabulate.

I withdrew and touched only what came to the surface.

Brodcuzynski: *Mental scream . . . This is nightmare . . . I've gone mad . . . God let me look away . . . Fear . . . Hate . . . Kill it.*

Braithewaite: *Sick disgust, retching . . . Medusa, monstrous foul, demonic abortion . . . Perseus! A shield, a weapon . . . strike . . . Its color . . . Slime, filth, stench, hate, kill, cleanse . . . Fire.*

Borg: *Delirium tremens . . . That damned alcohol . . . Shouldn't have brought it with me . . . Or hypnosis? . . . Kraken . . . Can't exist . . . Shouldn't exist . . . Worm that dieth not . . . Beowulf killed it . . . Abomination . . . Kill.*

Sam struck in with his musical, little-used voice. It cut through the welter of near-madness. I heard only snatches of it in my own intense preoccupation: ". . . highest life-form on four planets of a system . . . specialization . . . beautiful, is it not?"

Aventos: *Christ, planets swarming with them! . . . the star drive . . . sear them off . . . Cauterize, burn . . . monstrous horror . . . Never intelligence embodied thus . . . Line of guns thudding,*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sundered alien flesh flying.

M'Bassi: *Jungle, night . . . Fear . . . Leaping creature, spear, kill or be killed . . . Redness and insane delight.*

Lao T'sung: *Quick control, but vivid picture of heel squashing snake before blankout, and another obscene unverbalized picture.*

It was as though every racial hatred and fear of difference that had ever beset mankind welled up in a suppurating flow from their minds.

Scientific curiosity and thus conscious sanity returned within seconds. But to Sam and me it seemed hours.

Sam said: "I'm sorry to subject you to this, gentlemen, but we wanted immediate unconscious reactions. Had you been prepared, some of you might have retained rational control, according to your degree of advancement beyond atavistic xenophobia. But we are interested only in the degree of empathic rapport with other intelligences.

Sam called up a chair from the floor of the Hall and sat in it casually. Our group was alone now in the vastness of the Hall. A'hig, myself, and the six remained standing.

SAM stroked his Roman nose again and tried to explain. "Suppose your colonizing vessel had landed on one of the planets inhabited by A'hig's fellows, and they had suddenly semblized near you, would the hand controlling your weapons be restrained by reason? Possibly. But fear might trigger the weapon, even if you were otherwise well-protected.

"Suppose they approached you slowly and with circumspection, apparently in awe at your mastery of time and space, showing what you would take to be due humility in face of your technical achievements, could you learn to live in peace and cooperation with such—monsters? Especially when you learned they were your vast superiors in mental science? Yes, you say, but I doubt it. And there must be no doubt in such matters. You do not, it seems, know yourselves." He sighed. "Such a simple lesson, so long in the learning."

"Totally unfair!" Aventos blurted. "A farcial test, springing something like that. Not that we concede you have any damned right to make any kind of test at all."

"You confirm my views. Pride is a tiger and vanity its teeth." Sam, pleased with Lao T'Sung's quick control, had gone deep within him and found that proverb. "'Unfair' and 'concede' mean nothing to us."

Direct: *Off now, Stat. Reporting to Top. Not unpleased, but*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

long, long yet. Take them. Unlearning the tongue. Find it slightly distasteful now.

"The question, gentlemen," Sam murmured, "is not whether the Universe is fit for Man, but whether Man is fit for the Universe. You have answered it. He is not—yet."

He gestured toward shining Athena. "Know yourselves. Then return."

He semblized himself to his room.

Poor A'hig Onefour was becoming a little embarrassed. I sent a quick pleasure-scale to her-his-its vibration-mathematic-entertainment preen. Not so laughably removed from a wolf-whistle. Beautiful creature.

Direct: *Gratitude. That's all. Semblize off. Stay as sweet as you are.*

Query your meaning. Esthetic appreciation?

Sorry. Yes. Earth sexual. Habit. Thanks again.

A'hig semblized.

Braithewaite scratched his gray thatch. "What about this so-called examination?"

"You've been undergoing it since you arrived. You've just failed your Finals. So—back to school, kids."

Ahh, get away from me, you dirty black. You stink.

Jim, Jim, there's a spider in the bath! Uggh, beastly thing, kill it! (delicate legs, sensitive quivering palps, a thousand diamonds for eyes, a sweetly odd oblate spheroid for main body, a sheen of iridescent purple and green. A smear of dark blood on white porcelain.)

You lousy no-account half-breed.

I regret that our generous offer of an arrangement to restore a balance of trade has met with what can only be described as contempt. If such outrageous provocation should continue—

See, you pull its wings off an' its gotta crawl, it's gotta crawl over this pencil, see?

Hands off, punk, or I'll kick your teeth in.

There's a mouse! Quick, quick, it's getting away!

Kinda saw red. Didn't mean to kill him, honest.

Goddam furriners.

—PETER PHILLIPS

IF YOU LIKE SUPERB FANTASY

. . . The ad on page 160 is something you'll want to see . . . and act on. It's a gift and a cash saving and a new reading experience all in a single sparkling package! That's right, page 160.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

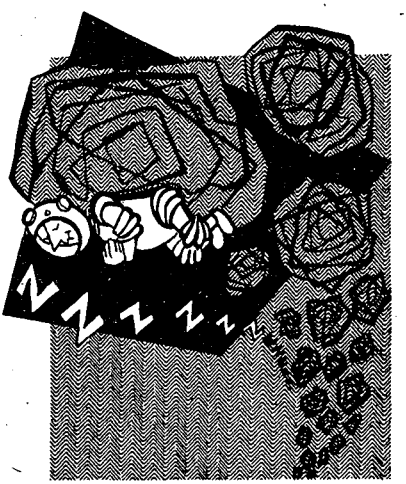
Origins of Galactic Law

By EDWARD WELLEN

When you go on an interstellar journey, be sure to take along this handy little legal guide.

Illustrated by STONE

Principle of self-punishment: provided the court concurs, any person pleading guilty to a crime may choose the punishment he deems fitting. (*People v. Kilgore*, 3380, 84 *Un.* 793)



PAUL KILGORE was a Terran pilot who was scheduled to make the first solo hop, in a faster-than-light craft, from Pluto to Alpha Centauri. Celebrating the coming event at the Universal Joint, a spacemen's hangout on Mars, he met a former shipmate. He testi-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fied at his trial that, after a nebulous number of Venus vapor cocktails, he agreed to drop his friend off at Pluto.

Kilgore said that while they were passing through the Asteroid Belt, between Mars and Jupiter, he discovered that the flap of the kit attached to his uniform was open. Anxiously, he felt in the pocket. It was empty. His doppler pills, compounded especially for his projected flight, were missing. He testified that he searched the entire ship and failed to find the pills. Then, with growing suspicion and rage, he looked at his snoring passenger.

He shook the limp figure of his friend and angrily asked if the latter had swallowed the pills. The friend made no answer except a foolish grin. Kilgore claimed that this was too much for him. Vengefully, he jammed his friend into a spacesuit and dumped him on one of the 50,000 or more mile-thick asteroids. Each pill, Kilgore testified, would hold up metabolism across 130 light-years. Long before the drug wore off, Kilgore said he believed, someone would come across his sleeping friend.

Still fuming, Kilgore returned to Mars for a new supply of the pills. His first stop was the Universal Joint. He testified that the bartender seemed glad to see him and handed him a small pill box. The bartender said that Kilgore had dropped it there.

When it came time for the judge to pronounce sentence, Kilgore asked to be allowed to impose his own punishment. The judge was surprised, but he heard Kilgore out. And he sanctioned the penalty, a harsher penalty than *he* had intended to impose.

Kilgore spent the remainder of his life hunting the sleeping body of the man he had marooned on one of the myriad asteroids.

Psychic guilt: fitting the punishment to the criminal supersedes fitting the punishment to the crime. (*People v. Nica,* 3286, 70 *Un.* 1245)

IN the lobby of the Jovian hostel at which he was staying, Bor Nica, a Sagittarian, brushed against another guest, an Antarean. The Antarean, being unused to the gravity of Jupiter, fell and bruised himself considerably. When he had struggled up again, however, instead of rebuking Nica for jostling him and not offering to assist him to his feet, he passed the incident off lightly. He was about to hop on his way again when Nica, in an insane rage, felled him with a blow. This time the fall was fatal.

Nica, instead of trying to escape, waited expectantly beside

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the body until a nickel led him off to detention. (Note: by 2012 U.E., inflation had caused *nickel* to replace *copper* as the designation for an officer of the law.) There he remained, happily awaiting trial, until word reached him that the widow of the Antarean he had murdered harbored no hatred for him, and had indeed forgiven him.

Infuriated, Nica broke out of his cell, located the widow and killed her, too. Again he waited beside the body of his victim. And again he not only did not resist arrest, but seemed to welcome it.

Smiling, he pleaded guilty to both murders and listened eagerly for the verdict. But the judge deferred passing sentence until sociologists could go into Nica's background for a clue to his seemingly illogical actions.

They found that Nica's society had stabilized itself on a mass psychosis. Because of atrocities his people had committed in their history, they had piled up a vast unpaid debt of guilt. This weighed so heavily on them that every normal individual in Nica's society had a compulsion to seek punishment.

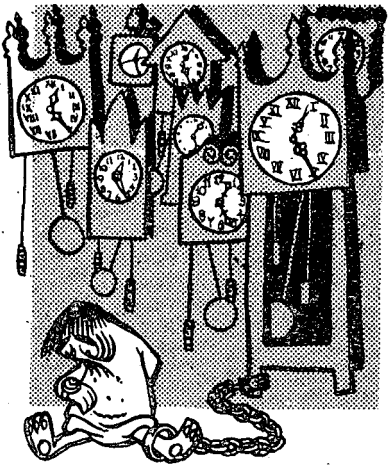
The judge studied this report. He reasoned that the greatest punishment Nica could receive would be *no* punishment. Any penalty he could impose would only gratify Nica instead of punishing him.

Therefore he set Nica free.

Frantic, Nica appealed the court's judgment, but in vain. The Galactic Tribunal held that he could not place himself in double jeopardy. The Jovians deported Nica to his home planet. There he remained an outcast because of his humiliating failure to obtain the punishment they all sought. His honor was not restored until he bribed a passing Cygnian to shoot him in a carefully contrived hunting accident.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Pro rata sentencing: terms of penal servitude are to be based upon comparative life expectancy. (People v. Gund, 3286, 70 Un. 1245)



IN the park on the vacation satellite orbiting around Altair VII was the body of a Vegan, beaten to death. Beside him lay the carcass of his pet ululu, also beaten to death. Erdo Gund, a Procyoni, voluntarily gave himself up. At his trial, Gund's deposition, which he had signed by impressing his noseprint, was offered in evidence by the prosecutor.

In this deposition, Gund admitted killing the pet's master — but not the pet. In fact, he stated, his motive for killing the master was the anger he felt when he saw the Vegan brutally beating the pet. He struck the Vegan down when the cumulative effect of witnessing nearly two hours of the master's cruelty and the pet's pain had proved unbearable.

At this point the judge interrupted the reading of the deposition. He said he had understood other witnesses to state that the Vegan's fatal beating of the ululu had lasted only ten minutes at most.

The prosecutor said that His Honor was correct in his understanding. But, he said, the deposition was accurate, too. He explained to the judge that, to the Terran-type observer, the Procyoni's span of life averaged two Earth years. In that length of time, the Procyoni lived — subjectively — as long as a centenarian Earthman.

The prosecutor further said that in view of all the circumstances, he was of the opinion that Gund could not plead "not guilty by reason of temporary insanity." However, added the prosecutor, he would ask His Honor to be lenient and take into account the temporal differential.

The judge followed the prosecutor's recommendation and sentenced Gund to 30 Earth hours of psychic guilt.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Semantic jurisprudence: that branch of the law which systematizes forensic debate on questions of meaning. (U. of Venus v. Vac. Inc. et al., 2937, 63 Un. 8451)

VAC., Inc., was a Terran corporation supplying the vacuum of space for use in laboratory research. At its plant on Luna, it manufactured its product by welding two duralloy hemispheres lip to lip and thus sealing a vacuum inside the globe they formed.

One container in a shipment to the University of Venus proved to be defective. The University sued for damages resulting from sudden failure of the built-in valve. These damages included the tearing of the elbow-beard of a visiting Ganymedean professor, which had been sucked into the globe.

Attorney for the defendants asked for dismissal of the suit on the grounds that a vacuum was *nothing,* and that when both parties to the action had stipulated the loss of a vacuum, the plaintiff in effect admitted losing nothing. In support of this contention, attorney for the defandants exhibited the advertising slogan of Vac., Inc., "Nothing — but the best!"

Attorney for the plaintiff countered the dismissal motion by stating that if this were true, then the defendants were confessing to the inequity of giving nothing in exchange for good hard cash. However, attorney for the plaintiff argued, no absolute vacuum exists in all space, there being a minimum of twelve molecules per cubic foot in the emptiest reaches. Therefore, she claimed, there is nothing in the Universe which one might name "nothing."

That last statement, attorney for the defendants replied scornfully, was self-contradictory. "Nothing" *exists,* he said; the space *between* the molecules is "nothing."

Quickly, attorney for the plaintiff exclaimed that now her learned opponent was arguing on the side of her client by agreeing that "nothing" is something.

At this point the judge wearily recessed court, declaring that he

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

intended to damp his brain waves with tonic chord therapy.

As soon as court reconvened, the judge asked if either party objected to the swearing in of a panel of semanticists. There was no objection. And so, before deciding on the dismissal motion, the judge submitted the problem to the panel.

With a squad of burly bailiffs keeping order among the venerable semanticists, the question finally came to a vote.

The majority decided that a vacuum is "something."

The judge denied the defendants' motion for dismissal, heard the case, and found for the plaintiff. He awarded to the University 40 million credits. But legal expenses and the adverse publicity bankrupted Vac., Inc.

It paid nothing.

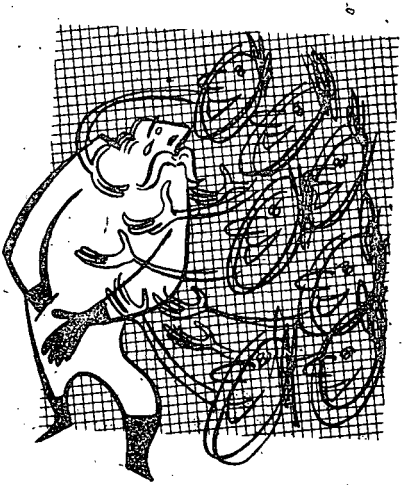
Law of identity: any judgment of the court is a true judgment in all succeeding cases where the circumstances are the same. (*Smith v. General Teletote,* 3016, 24 *Un.* 612)

JAK SMITH, a clerk in the Titan branch of the First Solar Bank & Trust Co., filed a civil suit against General Teletote. He sought to recover damages for injuries he had sustained while utilizing the facilities of the passenger division of that firm.

Under a governmental Class F priority (his heart could not stand the strain of spaceship travel), he had returned to his native Terra via teletote. He charged General Teletote with garbling him in transmission.

General Teletote admitted that its tri-dimensional scanner had reassembled Smith improperly. The firm also conceded that its Terran operator had been out on a *panjo* drunk, leaving the receptor controls untended and incorrectly adjusted — permitting electronic snow to piebald Smith.

But though it acknowledged its carelessness, General Teletote firmly disclaimed any liability. It produced the customary waiver



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

that Smith had signed prior to transmission, absolving General Teletote of all responsibility for mishap in transit and/or upon reception.

Smith replied that as he was now obviously not the same individual who had signed the waiver, its terms were not binding on him.

General Teletote answered that if Smith was not the same individual, he could not claim damages in the other's name.

Having studied the briefs, the Galactic Tribunal ruled that even by the signing of a waiver, an individual cannot divest himself of his inalienable right to his own identity.

Smith had just won his case when the "ghost image" of Smith came forward, pressing claims for a like award. To prove these claims, the ghost image produced witnesses who testified that $Smith_2$ had emerged from the receptor shortly after $Smith_1$, although records failed to show any other transmission scheduled for that time and place.

$Smith_1$ struggled for sole possession of his identity. He sided with General Teletote in its attempts to disprove $Smith_2$'s physical appearance by saying that the latter was merely a partial albino who saw a good chance to cash in on the accidental resemblance.

The battle ended suddenly one day in court when the judge intervened, pointing out that both had equally good evidence, that there was no doubt that they were the same man, and asked them to effect a compromise. Otherwise, the judge explained, the case would result in a deadlock. $Smith_1$ and $Smith_2$ quickly came to a settlement.

The two set up a partnership with the credits they collected and established a firm which became the foremost competitor of General Teletote.

Doctrine of excusable fraud: deception, when welcomed by the victimized party, comes within the realm of caveat emptor. (Based on a quashed indictment, 3426 U.E.)

UNTIL he worked his great coup, Conway Limbeck was a minor criminal preying on the gullible-minded and larcenous-hearted. He sold interests in a formula for synthesizing ambidextrose sugar. For years he thrived on this formula, which was more than his victims could claim. At the time he dreamed up his brilliant stroke, he was chief steward aboard a Sirius-bound liner. Thanks to forged credentials, he was making a getaway

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in the most comfortable style.

While the liner was approaching Sirius XIII, a passenger gave Limbeck a fifty credit tip. Limbeck examined the note. It gave him ideas. He stole into the chart room and trimmed the blank edges from the astronautical maps. These plastic strips had the official heat mark imbedded in them. Then Limbeck burgled enough photo supplies to counterfeit the strips into notes amounting to Cr. 3 trillion.

When the liner landed on Sirius XIII, Limbeck hastened to the Presidential Shack. Convincing credentials vouching for Limbeck as representative plenipotentiary of the Io Trading Trust gained him immediate admittance. After the ceremonial somersaults were exchanged, Limbeck announced that the Trust had authorized him to negotiate for that season's output of *tumul*.

The President was hard-of-smelling until the interpreter wafted that Limbeck had finally raised his offer to Cr. 2½ trillion. When he gave vent to his great satisfaction, the President nearly bowled Limbeck over.

Limbeck chartered a vessel with his remaining Cr. ½ trillion and took off with his precious payload. His vessel had hardly come out of synergy when the Siriutes realized that Limbeck had jetted a fast one on them. A

Sirius XIII patrol intercepted and boarded Limbeck's vessel. Limbeck's heart sank as he faced the boarding party. Then to his amazement he scented that the Siriutes were emitting friendly laughs. Their leader passed over a new agreement for Limbick to sign. It was a contract for *tumul* futures.

In bewilderment, Limbeck read the terms. They were extremely favorable to him—especially the explicit condition that he was to make payment in counterfeit credits only.

The Siriutes told him they valued the counterfeit more than the genuine. This fetish of theirs, they explained, stemmed from the darkest age of their history, when a tyrant had set himself up

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

through fraud. The revolutionary fervor with which they at last overthrew him fired in them a passion for skepticism. For this reason they treasured symbols of disbelief.

Limbeck was more than happy to sign the contract.

But news of the Sirius situation outsped his vessel and the GBI nailed him. However, the Galactic Government had no evidence with which to pin the counterfeiting charge on Limbeck, as the proud possessors of the fakes had hidden them and would not yield them up. The most that the government could do was to put a brake on his future activities: It enjoined him from counterfeiting.

Sirius XIII demanded that Limbeck fulfill the contract. The Galactic Tribunal ruled that the contract was illegal and invalid.

But the Secretary for Galactic defense privately informed Limbeck that he was anxious to see the deal come off, as *tumul* was vital to defense. Limbeck, of course, was equal to the problem.

He arranged a secret rendezvous in deep space. The Siriutes and Limbeck exchanged *tumul* and currency. After Limbeck's departure, the Siriutes noticed an inscription beginning to appear in each of the notes. The inscription read: **GENUINE—PASSED AS COUNTERFEIT.**

This double fraud doubly delighted the Siriutes and they gratefully bestowed upon Limbeck their highest award.

The medal, of course, was made of synthetic platinum.

—EDWARD WELLEN

MOVING?

If you want your GALAXY subscription sent to a new address, notify us at least FOUR WEEKS IN ADVANCE.

Why so long? Because . . .

Master and secondary lists have to be corrected.

A new addressograph plate has to be cut.

The plate has to be put in its proper alphabetical place in the addressograph machine..

Other people are moving, too, and their changes of address have to be processed.

Four weeks is none too long, but we can handle it. As soon as you know where you're moving to, please send the old as well as the new address immediately to . . .

GALAXY PUBLISHING CORP.
421 Hudson Street
New York 14, N. Y.

Current New Books:

Science & Fantasy Fiction

■ We carry a full line of all current American science fiction, as well as a large stock of scarce out-of-print books in this field. Back issues of science fiction magazines available.

STEPHEN'S BOOK SERVICE
45 FOURTH AVENUE (Cor. 9th St.)
New York 3, New York

Open Monday Thru Saturday:
9:30 A.M. to 6:30 P.M. Open
Wednesday Evenings until 8:00 P.M.
(Phone GRamercy 3-6294)

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

GALAXY MAGAZINE

and

SIMON and SCHUSTER

announce

The Richest Science Fiction Novel Contest in History

$6500

minimum

Guaranteed to the author of the best ORIGINAL Science Fiction Novel Submitted

. . . To raise the literary level of the field still higher . . .

. . . To augment the already high standards with new writing talent . . .

. . . To focus more attention on this increasingly important form of literature.

Galaxy Science Fiction Magazine and one of the leading book publishers, Simon and Schuster, Inc. have joined to offer by far the LARGEST CASH PRIZE ever awarded a science fiction novel.

The author of the prize-winning novel will receive AT LEAST $6500 in outright cash gifts, payments and guaranteed advance royalties.

. . . The award novel will appear as a serial in Galaxy Science Fiction Magazine . . .

. . . It will be published in book form by Simon and Schuster . . .

. . . It will be republished in pocket size by Dell Publishing Co.

The prize-winning author will thus receive a GUARANTEED MINIMUM of $5500 for the purchase of First World serial and T.V. rights by Galaxy Science Fiction Magazine and guaranteed advance royalties for book and reprint publication . . . plus AN OUTRIGHT GIFT of $1000.

The entire $6500 award will be paid to the winner at the time his (or her) name is announced—certainly the largest single payment to any author in the history of science fiction.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Here are the details and rules of the $6500 Galaxy Magazine and Simon and Schuster Science Fiction contest

1. The closing date is October 15, 1953. Manuscripts may be submitted at any time prior to that date and sent to NOVEL CONTEST, Galaxy Science Fiction, 421 Hudson Street, New York 14, N. Y.
2. Manuscripts must be ORIGINAL (never before published in any form) and not committed to any other magazine or book publisher.
3. Novels submitted must be between 60,000 and 75,000 words in length, typed in black ink on one side of white bond paper, double-spaced, with at least an inch margin on all sides and each page numbered.
4. Manuscripts must be accompanied by sufficient postage for return.
5. There will be only ONE winner, but all other submissions of merit will be given full consideration for possible serialization in Galaxy Science Fiction Magazine, book publication by Simon and Schuster, or both, at standard rates.
6. There are no requirements, stipulations or taboos regarding themes. Fresh ideas and convincing characterization, conflict and plot development are the important criteria. Writers who enter the contest can best familiarize themselves with the standards of the judges through study of the science fiction published by Galaxy Science Fiction Magazine and Simon and Schuster.
7. Sole judges will be the editorial staffs of Galaxy Science Fiction Magazine and Simon and Schuster. The decisions of the judges will be final.
8. Contestants agree, in submitting their manuscripts, to accept standard publishing agreements with the sponsors of the contest in the event that their novel is the winning entry.
9. Anyone may enter this contest except employees of the Galaxy Publishing Corp. and of Simon and Schuster, Inc., and their families; AND authors who are ineligible because of contractual obligations to their present publishers . . . which means, in effect, that contestants will NOT be competing with most of the established "big names" of science fiction.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

UNREADY TO WEAR

Escaping your worries is good sound medical advice—as long as you leave yourself behind!

By KURT VONNEGUT, JR.

I DON'T suppose the oldsters, those of us who weren't born into it, will ever feel quite at home being amphibious — amphibious in the new sense of the word. I still catch myself feeling blue about things that don't matter any more.

I can't help worrying about my business, for instance — or what used to be my business. After all, I spent thirty years building the thing up from scratch, and now the equipment is rusting and getting clogged with dirt. But even though I know it's silly of me to care what happens to the business, I borrow a body from a storage center every so often, and go around the old home town, and clean and oil as much of the equipment as I can.

Of course, all in the world the equipment was good for was mak-

Illustrated by SUSSMAN

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ing money, and Lord knows there's plenty of that lying around. Not as much as there used to be, because there at first some people got frisky and threw it all around, and the wind blew it every which way. And a lot of go-getters gathered up piles of the stuff and hid it somewhere. I hate to admit it, but I gathered up close to a half million myself and stuck it away. I used to get it out and count it sometimes, but that was years ago. Right now I'd be hard put to say where it is.

But the worrying I do about my old business is bush league stuff compared to the worrying my wife, Madge, does about our old house. That thing is what she herself put in thirty years on while I was building the business. Then no sooner had we gotten nerve enough to build and decorate the place than everybody we cared anything about got amphibious. Madge borrows a body once a month and dusts the place, though the only thing a house is good for now is keeping termites and mice from getting pneumonia.

WHENEVER it's my turn to get into a body and work as an attendant at the local storage center, I realize all over again how much tougher it is for women to get used to being amphibious.

Madge borrows bodies a lot oftener than I do, and that's true of women in general. We have to keep three times as many women's bodies in stock as men's bodies, in order to meet the demand. Every so often, it seems as though a woman just *has* to have a body, and doll it up in clothes, and look at herself in a mirror. And Madge, God bless her, I don't think she'll be satisfied until she's tried on every body in every storage center on Earth.

It's been a fine thing for Madge, though. I never kid her about it, because it's done so much for her personality. Her old body, to tell you the plain blunt truth, wasn't anything to get excited about, and having to haul the thing around made her gloomy a lot of the time in the old days. She couldn't help it, poor soul, any more than anybody else could help what sort of body they'd been born with, and I loved her in spite of it.

Well, after we'd learned to be amphibious, and after we'd built the storage centers and laid in body supplies and opened them to the public, Madge went hog wild. She borrowed a platinum blonde body that had been donated by a burlesque queen, and I didn't think we'd ever get her out of it. As I say, it did wonders for her self-confidence.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I'm like most men and don't care particularly what body I get. Just the strong, good-looking, healthy bodies were put in storage, so one is as good as the next one. Sometimes, when Madge and I take bodies out together for old times' sake, I let her pick out one for me to watch whatever she's got on. It's a funny thing how she always picks a blond, tall one for me.

My old body, which she claims she loved for a third of a century, had black hair, and was short and paunchy, too, there toward the last. I'm human and I couldn't help being hurt when they scrapped it after I'd left it, instead of putting it in storage. It was a good, homy, comfortable body; nothing fast and flashy, but reliable. But there isn't much call for that kind of body at the centers, I guess. I never ask for one, at any rate.

The worst experience I ever had with a body was when I was flimflammed into taking out the one that had belonged to Dr. Ellis Konigswasser. It belongs to the Amphibious Pioneers' Society and only gets taken out once a year but for the big Pioneers' Day Parade, on the anniversary of Konigswasser's discovery. Everybody said it was a great honor for me to be picked to get into Konigswasser's body and lead the parade.

Like a plain damn fool, I believed them.

THEY'LL have a tough time getting me into that thing again — ever. Taking that wreck out certainly made it plain why Konigswasser discovered how people could do without their bodies. That old one of his practically *drives* you out. Ulcers, headaches, arthritis, fallen arches — a nose like a pruning hook, piggy little eyes, and a complexion like a used steamer trunk. He was and still is the sweetest person you'd ever want to know, but, back when he was stuck with that body, nobody got close enough to find out.

We tried to get Konigswasser back into his old body to lead us when we first started having the Pioneers' Day Parades, but he wouldn't have anything to do with it, so we always have to flatter some poor boob into taking on the job. Konigswasser marches, all right, but as a six-foot cowboy who can bend beer cans double between his thumb and middle finger.

Konigswasser is just like a kid with that body. He never gets tired of bending beer cans with it, and we all have to stand around in our bodies after the parade, and watch as though we were very impressed.

I don't suppose he could bend

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

very much of anything back in the old days.

Nobody mentions it to him, since he's the grand old man of the Amphibious Age, but he plays hell with bodies. Almost every time he takes one out, he busts it, showing off. Then somebody has to get into a surgeon's body and sew it up again.

I don't mean to be disrespectful of Konigswasser. As a matter of fact, it's a respectful thing to say that somebody is childish in certain ways, because it's people like that who seem to get all the big ideas.

There is a picture of him in the old days down at the Historical Society, and you can see from that that he never did grow up as far as keeping up his appearance went — doing what little he could with the rattle-trap body Nature had issued him.

His hair was down below his collar, he wore his pants so low that his heels wore through the legs above the cuffs, and the lining of his coat hung down in festoons all around the bottom. And he'd forget meals, and go out into the cold or wet without enough clothes on, and he would never notice sickness until it almost killed him. He was what we used to call absent-minded. Looking back now, of course, we say he was starting to be amphibious.

KONIGSWASSER was a mathematician, and he did all his living with his mind. The body he had to haul around with that wonderful mind was about as much use to him as a flat car of scrap-iron. Whenever he got sick and *had* to pay some attention to his body, he'd rant somewhat like this:

"The mind is the only thing about human beings that's worth anything. Why does it have to be tied to a bag of skin, blood, hair, meat, bones, and tubes? No wonder people can't get anything done, stuck for life with a parasite that has to be stuffed with food and protected from weather and germs all the time. And the fool thing wears out anyway — no matter how much you stuff and protect it!

"Who," he wanted to know, "really wants one of the things? What's so wonderful about protoplasm that we've got to carry so damned many pounds of it with us wherever we go?

"Trouble with the world," said Konigswasser, "isn't too many people — it's too many bodies."

When his teeth went bad on him, and he had to have them all out, and he couldn't get a set of dentures that were at all comfortable, he wrote in his diary, "If living matter was able to evolve enough to get out of the ocean, which was really quite a

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

pleasant place to live, it certainly ought to be able to take another step and get out of bodies, which are pure nuisances when you stop to think about them."

He wasn't a prude about bodies, understand, and he wasn't jealous of people who had better ones than he did. He just thought bodies were a lot more trouble than they were worth.

He didn't have great hopes that people would really evolve out of their bodies in his time. He just wished they would. Thinking hard about it, he walked through a park in his shirtsleeves and stopped off at the zoo to watch the lions being fed. Then, when the rainstorm turned to sleet, he headed back home and was interested to see firemen on the edge of a lagoon, where they were using a pulmotor on a drowned man.

Witnesses said the old man had walked right into the water and had kept going without changing his expression until he'd disappeared. Konigswasser got a look at the victim's face and said he'd never seen a better reason for suicide. He started for home again and was almost there before he realized that that was his own body lying back there.

HE went back to reoccupy the body just as the firemen got it breathing again, and he walked it home, more as a favor to the city than anything else. He walked it into his front closet, got out of it again, and left it there.

He took it out only when he wanted to do some writing or turn the pages of a book, or when he had to feed it so it would have enough energy to do the few odd jobs he gave it. The rest of the time, it sat motionless in the closet, looking dazed and using almost no energy. Konigswasser told me the other day that he used to run the thing for about a dollar a week, just taking it out when he really needed it.

But the best part was that Konigswasser didn't have to sleep any more, just because *it* had to sleep; or be afraid any more, just because *it* thought it might get hurt; or go looking for things *it* seemed to think it had to have. And, when *it* didn't feel well, Konigswasser kept out of it until it felt better, and he didn't have to spend a fortune keeping the thing comfortable.

When he got his body out of the closet to write, he did a book on how to get out of one's own body, which was rejected without comment by twenty-three publishers. The twenty-fourth sold two million copies, and the book changed human life more than the invention of fire, numbers, the alphabet, agriculture, or the wheel. When somebody told Ko-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

nigswasser that, he snorted that they were damning his book with faint praise. I'd say he had a point there.

By following the instructions in Konigswasser's book for about two years, almost anybody could get out of his body whenever he wanted to. The first step was to understand what a parasite and dictator the body was most of the time, then to separate what the body wanted or didn't want from what you yourself — your psyche — wanted or didn't want. Then, by concentrating on what you wanted, and ignoring as much as possible what the body wanted beyond plain maintenance, you made your psyche demand its rights and become self-sufficient.

That's what Konigswasser had done without realizing it, until he and his body had parted company in the park, with his psyche going to watch the lions eat, and with his body wandering out of control into the lagoon.

The final trick of separation, once your psyche grew independent enough, was to start your body walking into some direction and suddenly take your psyche off in another direction. You couldn't do it standing still, for some reason — you had to walk.

At first, Madge's and my psyches were clumsy at getting along outside our bodies, like the first sea animals that got stranded on land millions of years ago, and who could just waddle and squirm and gasp in the mud. But we became better at it with time, because the psyche can naturally adapt so much faster than the body.

MADGE and I had good reason for wanting to get out. Everybody who was crazy enough to try to get out at the first had good reasons. Madge's body was sick and wasn't going to last a lot longer. With her going in a little while, I couldn't work up enthusiasm for sticking around much longer myself. So we studied Konigswasser's book and tried to get Madge out of her body before it died. I went along with her, to keep either one of us from getting lonely. And we just barely made it — six weeks before her body went all to pieces.

That's why we get to march every year in the Pioneers' Day Parade. Not everybody does — only the first five thousand of us who turned amphibious. We were guinea pigs, without much to lose one way or another, and we were the ones who proved to the rest how pleasant and safe it was — a heck of a lot safer than taking chances in a body year in and year out.

Sooner or later, almost everybody had a good reason for giving

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

it a try. There got to be millions and finally more than a billion of us — invisible, insubstantial, indestructible, and, by golly, true to ourselves, no trouble to anybody, and not afraid of anything.

When we're not in bodies, the Amphibious Pioneers can meet on the head of a pin. When we get into bodies for the Pioneers' Day Parade, we take up over fifty thousand square feet, have to gobble more than three tons of food to get enough energy to march; and lots of us catch colds or worse, and get sore because somebody's body accidentally steps on the heel of somebody else's body, and get jealous because some bodies get to lead and others have to stay in ranks, and — oh, hell, I don't know what all.

I'm not crazy about the parade. With all of us there, close together in bodies — well, it brings out the worst in us, no matter how good our psyches are. Last year, for instance, Pioneers' Day was a scorcher. People couldn't help being out of sorts, stuck in sweltering, thirsty bodies for hours.

Well, one thing led to another, and the Parade Marshal offered to beat the daylights out of my body with his body, if my body got out of step again. Naturally, being Parade Marshal, he had the best body that year, except for Konigswasser's cowboy, but I told him to soak his fat head, anyway. He swung, and I ditched my body right there, and didn't even stick around long enough to find out if he connected. He had to haul my body back to the storage center himself.

I stopped being mad at him the minute I got out of the body. I understood, you see. Nobody but a saint could be really sympathetic or intelligent for more than a few minutes at a time in a body — or happy, either, except in short spurts. I haven't met an amphibian yet who wasn't easy to get along with, and cheerful and interesting — as long as he was outside a body. And I haven't met one yet who didn't turn a little sour when he got into one.

The minute you get in, chemistry takes over — glands making you excitable or ready to fight or hungry or mad or affectionate, or — well you never know *what's* going to happen next.

THAT'S why I can't get sore at the enemy, the people who are against the amphibians. They never get out of their bodies and won't try to learn. They don't want anybody else to do it, either, and they'd like to make the amphibians get back into bodies and stay in them.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

After the tussle I had with the Parade Marshal, Madge got wind of it and left *her* body right in the middle of the Ladies' Auxiliary. And the two of us, feeling full of devilment after getting shed of the bodies and the parade, went over to have a look at the enemy.

I'm never keen on going over to look at them. Madge likes to see what the women are wearing. Stuck with their bodies all the time, the enemy women change their clothes and hair and cosmetic styles a lot oftener than we do on the women's bodies in the storage centers.

I don't get much of a kick out of the fashions, and almost everything else you see and hear in enemy territory would bore a plaster statue into moving away.

Usually, the enemy is talking about old-style reproduction, which is the clumsiest, most comical, most inconvenient thing anyone could imagine, compared with what the amphibians have in that line. If they aren't talking about that, then they're talking about food, the gobs of chemicals they have to stuff into their bodies. Or they'll talk about fear, which we used to call politics — job politics, social politics, government politics.

The enemy hates that, having us able to peek in on them any time we want to, while they can't ever see us unless we get into bodies. They seem to be scared to death of us, though being scared of amphibians makes as much sense as being scared of the sunrise. They could have the whole world, except the storage centers, for all the amphibians care. But they bunch together as though we were going to come whooping out of the sky and do something terrible to them at any moment.

They've got contraptions all over the place that are supposed to detect amphibians. The gadgets aren't worth a nickel, but they seem to make the enemy feel good — like they were lined up against great forces, but keeping their nerve and doing important, clever things about it. Knowhow — all the time they're patting each other about how much knowhow they've got, and about how we haven't got anything by comparison. If knowhow means weapons, they're dead right.

I guess there is a war on between them and us. But we never do anything about holding up our side of the war, except to keep our parade sites and our storage centers secret, and to get out of bodies every time there's an air raid, or the enemy fires a rocket, or something.

That just makes the enemy

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

madder, because the raids and rockets and all cost plenty, and blowing up things nobody needs anyway is a poor return on the taxpayer's money. We always know what they're going to do next, and when and where, so there isn't any trick to keeping out of their way.

But they are pretty smart, considering they've got bodies to look after besides doing their thinking, so I always try to be cautious when I go over to watch them. That's why I wanted to clear out when Madge and I saw a storage center in the middle of one of their fields. We hadn't talked to anybody lately about what the enemy was up to, and the center looked awfully suspicious.

Madge was optimistic, the way she's been ever since she borrowed that burlesque queen's body, and she said the storage center was a sure sign that the enemy had seen the light, that they were getting ready to become amphibious themselves.

Well, it looked like it. There was a brand-new center, stocked with bodies and open for business, as innocent as you please. We circled it several times, and Madge's circles got smaller and smaller, as she tried to get a close look at what they had in the way of ladies' ready-to-wear.

"Let's beat it," I said.

"I'm just looking," said Madge. "No harm in looking."

Then she saw what was in the main display case, and she forgot where she was or where she'd come from.

The most striking woman's body I'd ever seen was in the case — six feet tall and built like a goddess. But that wasn't the payoff. The body had copper-colored skin, chartreuse hair and fingernails, and a gold lamé evening gown. Beside that body was the body of a blond, male giant in a pale blue field marshal's uniform, piped in scarlet, and spangled with medals.

I think the enemy must have swiped the bodies in a raid on one of our outlying storage centers, and padded and dyed them, and dressed them up.

"Madge, come back!" I said.

The copper-colored woman with the chartreuse hair moved. A siren screamed and soldiers rushed from hiding places to grab the body Madge was in.

The center was a trap for amphibians!

The body Madge hadn't been able to resist had its ankles tied together, so Madge couldn't take the few steps she had to take if she was going to get out of it again.

The soldiers carted her off triumphantly as a prisoner of war. I got into the only body avail-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

able, the fancy field marshal, to try to help her. It was a hopeless situation, because the field marshal was bait, too, with its ankles tied. The soldiers dragged me after Madge.

THE cocky young major in charge of the soldiers did a jig along the shoulder of the road, he was so proud. He was the first man ever to capture an amphibian, which was really something from the enemy's point of view. They'd been at war with us for years, and spent God knows how many billions of dollars, but catching us was the first thing that made any amphibians pay much attention to them.

When we got to the town, people were leaning out of windows and waving their flags, and cheering the soldiers, and hissing Madge and me. Here were all the people who didn't want to be amphibious, who thought it was terrible for anybody to be amphibious — people of all colors, shapes, sizes, and nationalities, joined together to fight the amphibians.

It turned out that Madge and I were going to have a big trial. After being tied up every which way in jail all night, we were taken to a court room, where television cameras stared at us.

Madge and I were worn to frazzles, because neither one of us had been cooped up in a body that long since I don't know when. Just when we needed to think more than we ever had, in jail before the trial, the bodies developed hunger pains and we couldn't get them comfortable on the cots, no matter how we tried; and, of course, the bodies just had to have their eight hours sleep.

The charge against us was a capital offense on the books of the enemy — *desertion*. As far as the enemy was concerned, the amphibians had all turned yellow and run out on their bodies, just when their bodies were needed to do brave and important things for humanity.

We didn't have a hope of being acquitted. The only reason there was a trial at all was that it gave them an opportunity to sound off about why they were so right and we were so wrong. The court room was jammed with their big brass, all looking angry and brave and noble.

"Mr. Amphibian," said the prosecutor, "you are old enough, aren't you, to remember when all men had to face up to life in their bodies, and work and fight for what they believed in?"

"I remember when the bodies were always getting into fights, and nobody seemed to know why, or how to stop it," I said politely. "The only thing every-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

body seemed to believe in was that they didn't like to fight."

"What would you say of a soldier who ran away in the face of fire?" he wanted to know.

"I'd say he was scared silly."

"He was helping to lose the battle, wasn't he?"

"Oh, sure." There wasn't any argument on that one.

"Isn't that what the amphibians have done — run out on the human race in the face of the battle of life?"

"Most of us are still alive, if that's what you mean," I said.

IT was true. We hadn't licked death, and weren't sure we wanted to, but we'd certainly lengthened life something amazing, compared to the span you could expect in a body.

"You ran out on your responsibilities!" he said.

"Like you'd run out of a burning building, sir," I patiently explained.

"Leaving everyone else to struggle on alone!"

"They can all get out the same door that we got out of. You can all get out any time you want to. All you do is figure out what you want and what your body wants, and concentrate on —"

The judge banged his gavel until I thought he'd split it. Here they'd burned every copy of Konigswasser's book they could find, and there I was giving a course in how to get out of a body over a whole television network.

"If you amphibians had your way," said the prosecutor, "everybody would run out on his responsibilities, and let life and progress as we know them disappear completely."

"Why, sure," I agreed. "That's the point."

"Men would no longer work for what they believe in?" he challenged.

"I had a friend back in the old days who drilled holes in little square thingamajigs for seventeen years in a factory, and he never did get a very clear idea of what they were for. Another one I knew grew raisins for a glassblowing company, and the raisins weren't for anybody to eat, and he never did find out why the company bought them. Things like that make me sick — now that I'm in a body, of course — and what I used to do for a living makes me even sicker."

"Then you despise human beings and everything they do," he said.

"I like them fine — better than I ever did before. I just think it's a dirty shame what they have to do to take care of their bodies. You ought to get amphibious and see how happy people can be when they don't have to worry

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

about where their body's next meal is coming from, or how to keep it from freezing in the wintertime, or what's going to happen to them when their body wears out."

"And that, sir, means the end of ambition, the end of greatness!"

"Oh, I don't know about that," I said. "We've got some pretty great people on our side. They'd be great in *or* out of bodies. It's the end of fear is what it is." I looked right into the lens of the nearest television camera. "And *that*'s the most wonderful thing that ever happened to people."

Down came the judge's gavel again, and the brass started to shout me down. The television men turned off their cameras frantically, and all the spectators, except for the biggest brass, were cleared out. I knew I'd really said something. All anybody would be getting on his television set now was organ music.

When the confusion died down, the judge said the trial was over, and that Madge and I were guilty of desertion.

NOTHING I could do could get us in any worse, so I talked back.

"Now I understand you poor fish," I said. "You couldn't get along without fear. That's the only skill you've got — how to scare yourselves and other people into doing things. That's the only fun you've got, watching people jump for fear of what you'll do to their bodies or take away from their bodies."

Madge got in her two cents' worth. "The only way you can get any response from anybody is to scare them."

"Contempt of court!" said the judge.

"The only way you can scare people is if you can keep them in their bodies," I told him.

The soldiers grabbed Madge and me and started to drag us out of the court room.

"This means war!" I yelled.

Everything stopped right there and the place got very quiet.

"We're already at war," said a general uneasily.

"Well, *we're* not," I answered, "but we will be, if you don't untie Madge and me this instant." I was fierce and impressive in that field marshal's body.

"You haven't any weapons," said the judge, "no knowhow. Outside of bodies, amphibians are nothing."

"If you don't cut us loose by the time I count ten," I told him, "the amphibians will occupy the bodies of the whole kit and caboodle of you and march you right off the nearest cliff. The place is surrounded." That was hogwash, of course. Only one per-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

son can occupy a body at a time, but the enemy couldn't be sure of that. "One! Two! Three!"

The general swallowed, turned white, and waved his hand vaguely.

"Cut them loose," he said weakly.

The soldiers, terrified, too, were glad to do it. Madge and I were freed.

I took a couple of steps, headed my spirit in another direction, and that beautiful field marshal, medals and all, went crashing down the staircase like a grandfather clock.

I realized that Madge wasn't with me. She was still in that copper-colored body with the chartreuse hair and fingernails.

"What's more," I heard her saying, "in payment for all the trouble you've caused us, this body is to be addressed to me at New York, delivered in good condition no later than next Monday."

"Yes, ma'am," said the judge.

WHEN we got home, the Pioneers' Day Parade was just breaking up at the local storage center, and the Parade Marshal got out of his body and apologized to me for acting the way he had.

"Heck, Herb," I said, "you don't need to apologize. You weren't yourself. You were parading around in a body."

That's the best part of being amphibious, next to not being afraid — people forgive you for whatever fool thing you might have done in a body.

Oh, there are drawbacks, I guess, the way there are drawbacks to everything. We still have to work off and on, maintaining the storage centers and getting food to keep the community bodies going. But that's a small drawback, and all the big drawbacks I ever heard of aren't real ones, just old-fashioned thinking by people who can't stop worrying about things they used to worry about before they turned amphibious.

As I say, the oldsters will probably never get really used to it. Every so often, I catch myself getting gloomy over what happened to the pay-toilet business it took me thirty years to build.

But the youngsters don't have any hangovers like that from the past. They don't even worry much about something happening to the storage centers, the way us oldsters do.

So I guess maybe that'll be the next step in evolution — to break clean like those first amphibians who crawled out of the mud into the sunshine, and who never did go back to the sea.

—KURT VONNEGUT, JR.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

(*continued from page 3*)
have value then, for they can be eaten, worn, bartered for other commodities. They remain real; money does not.

This is not what we are experiencing today. You'll find personal difficulties in any time of prosperity, just as you'll find prosperous individuals in any depression, but it is the health of the economy as a whole that counts, not the fortune or misfortune of persons or groups.

There is only a single conclusion to be drawn from the application of relativity to economics:

Our system has, with marvelous resiliency, balanced prices and incomes to such an astonishingly great extent that whatever dangers face us, inflation is not one of them.

NATURALLY, you can count on the creative mind to hunt for a story in any given situation. For example:

We wistfully remember when steak was 37c a pound, custom-made suits cost $50, the average house was priced under $5000, and our money was wooed by desperate offers of bargains.

Those were days, yes, sir! The good old days — of low prices.

We have considerably more trouble remembering just how scarce our money was. We now work shorter hours to earn a pound of steak, buy more suits, and never have so many of us owned homes.

These, then, are the days — of high incomes.

All some genius has to do is give us the incomes of today and the prices of the past. It can be done only in fiction, and even there it would be hard to work out logically.

There's another psychological quirk in the situation. Mark Twain noted it in *A Connecticut Yankee in King Arthur's Court.*

If people are offered their choice of 10c an hour and 10c a pound, or $1000 an hour and $1000 a pound, they'll almost invariably choose $1000 an hour and $1000 a pound—even though there is not the least actual difference.

Why? I don't know. Maybe because it feels good to strip big bills off a thick roll while grumbling about what prices *used* to be.

The editorial that started all this fuss began: "You might say that humanity's slogan is, 'The obvious we see eventually; the completely apparent takes longer.'"

To that paraphrase of the Army Corps of Engineers' motto, I should have added: "When you contradict 'common sense,' keep your motor running for a fast getaway."

—H. L. GOLD

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE NEXT TWELVE ARE SWELL

•

IF you could only see what we have in store for the Next 12 Issues, you'd JET MAIL the coupon below!

We have stories ready to run by ISAAC ASIMOV, H. L. GOLD, TED STURGEON, F. L. WALLACE and stories by BESTER, HEINLEIN, KORNBLUTH, KUTTNER and C. L. MOORE in shaping stage to appear this year in GALAXY, the tops in Science Fiction.

•

EIGHT out of the next twelve covers are ready, and they are terrific. The covers will introduce three new artists. You will clamor for more of their work.

•

WILLY LEY has lined up some "easy to digest" science articles that tell about the space station now in development.

ALL IN ALL . . . THE NEXT 12 ARE SWELL!

•

Don't miss a single issue—Let the mail man deliver them right to your door a week before they go on sale at your newsstand. Fill in the coupon and mail today for your TWELVE TICKETS TO TOP SCIENCE FICTION PLEASURE.

SPECIAL OFFER

GALAXY PUBLISHING CORP., 421 HUDSON ST., NEW YORK 14, N. Y.

	1 Year	2 Years	3 Years
ENCLOSE	☐ 3.50	☐ 6.50	☐ 9.00

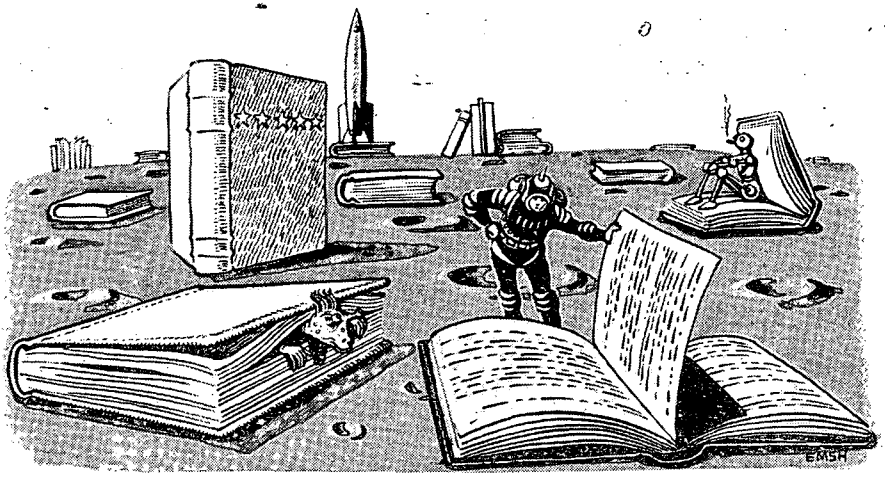
(Add $1.00 Foreign Postage for each year)

Your Name .....

Address .....

City ..... State .....

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



GALAXY'S 5 Star Shelf

THE ROLLING STONES by Robert Heinlein. Charles Scribner's Sons, New York, 1952. 276 pages, $2.50

TIMES must be getting pretty bad when the best science fiction of the month is a juvenile. However, *The Rolling Stones* might take leading place even if the competition was stiff. For this is one of Heinlein's most delightful tales for young (and old) about the coming era of space travel.

It has wit (including some monstrous puns), richly lifelike people, believable plot (provided you grant the premises), some blistering commentary (as, for example, the part on the beauties of our internal combustion motors!), and an outlook that is both adventuresome and mature.

The tale tells of a pair of ingenious 17-year-old twins named Castor and Pollux Stone, who are inventors and haywirers and some times general nuicances, and of their travels, with the other members of the Stone family, from the Moon clear out to the Asteroid Belt, with a stop en route at Mars.

Mixed up in the astral pottage is a telepathic youngest brother

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

who always beats his grandma at chess because he can read her mind; some unflattering satire on television space opera (one is being written by the Stone family, ostensibly by seasoned spaceman Roger Stone, but actually as a collaboration); a 90-year-old grandma named Hazel, an enchanting old adventuress.

The bicycle-repair-shop-in-space is an incident not easily forgotten — nor are the strange reproductive customs of the Martian "flat cats," lovable pets, BUT — !

A thoroughly delightful job. Don't hesitate to give it to a youngster — or to read it yourself.

DAVID STARR: SPACE RANGER by Paul French. Doubleday & Co., New York, 1952. 186 *pages,* $2.50

THIS is another rip-snorting juvenile by a member of the profession who certainly knows what he is doing — Isaac Asimov, who is hiding behind that "French" falseface.

This one is strictly for blood-and-thunder; "gripping" is the word, and (for my taste) a bit too violent from its first two sentences, "David Starr was staring right at the man, so he saw it happen. He saw him die," to its final episode where the hero puts the villain through a medieval course of torture by slow poison.

However, violence aside, it is a thrilling tale.

The plot: foods raised on Mars are essential to Earth's people, about 5,000 years from now. Villains are trying to get control of the Solar System's government by submitting Earth's populace to slow poison. David Starr, young Council of Science member, goes to Mars and after many adventures (including his discovery of the existence of real Martians in caves far below the planet's surface) pins down the rotters and frees Earth from threat of extinction.

Not a girl in a carload; no romance; parlous little science; but endless imagination, exciting ideas and events. A good juvenile needn't offer more. This would be good even if it had less to offer.

PLANTS, MAN AND LIFE by Edgar Anderson. Little Brown & Co., Boston, 1952. 245 *pages,* $4.00

HERE is an item that anyone who enjoys Willy Ley's natural history books will not want to miss. It is right down the science fiction lover's lane, telling an enthralling story of plant origins, plant variations and plant mysteries, with special emphasis on certain common weeds and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

agricultural crop plants.

Admittedly a little heavier than the popularizations of Ley, this book by the assistant director of the Missouri Botanical Garden and Professor of Botany at Washington University, St. Louis, is nevertheless an exciting adventure into a "new continent," the story of our ordinary plants.

For once I can agree with a jacket blurb: "Probably not since the time of Darwin has there been a book more intelligible to the general reader, which was also of direct significance in the realm of science."

THE STARMEN by Leigh Brackett. Gnome Press, New York, 1952. 213 *pages,* $2.75

MISS BRACKETT'S first novel in hard covers is a pleasurable way of passing a couple of hours. She writes well, moves her plot along at a suitable pace, and maneuvers her characters in a lifelike manner.

The story deals with an American, Michael Trehearne, who discovers that he is one of an alien world of mutants whose mutation is such that they are able to stand the physical effects of acceleration for interstellar flight. The discovery is strange indeed, and so is life on the hidden spaceship of the Vardda, as the mutants are called.

Trehearne leaves Earth and becomes an accepted Varddan. There is a beautiful girl, Shairn; a villain, Kerrel; and a plot which involves the efforts of a certain group to give the secret of star flight to all people of the Universe, removing it from the status of a Varddan monopoly. Everything comes out right in the end, of course.

DOG IN THE SKY by Norman Corwin. Illustrated by Tibor Gergely. Simon & Schuster, New York, 1952. 156 *pages,* $3.00

IN THIS whimsy about the Galaxy, Runyon Jones, aged 10, sets out to locate Curgatory, where his dog, Pootzy, went after being run over by an auto. It is imaginative, gently spoofs BEMS and other science fiction cliches, and it is occasionally rather sharp on the inequities of rules-and-regulations, bureaucrats, and so on.

Among the characters, pleasant and otherwise, whom you will meet are Mother Nature, B. L. Z. Bubb, Father Time, and the Giant.

It's all rather cute, but (except once or twice) not sickeningly so. Fun for those who like *Stuart Little* by E. B. White, or *The White Deer* by James Thurber—though not approaching those two pluperfect gems.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

PRISONER IN THE SKULL by Charles Dye. Abelard Press, New York, 1952. 256 *pages,* $2.50

THERE are 21 chapters in this book. By the end of Chapter 10, every important character except the hero, the mystery woman, the watchman and "Hypo Ned" have been bumped off. A few pages later, the watchman is found dead, half a dozen other supernumeraries have been permanently disposed of or conked on the bean.

At the end, after roughly a dozen more completely uncalled-for murders of unimportant people, one finds that practically no one is left except the hero, who has bumped off Hypo Ned, and the mystery woman, who takes over the hero with the following ineffable phrases which close the book: "You need someone to watch you," she finally said . . . "To kill you, of course . . ." And the last three words: "Their lips met."

There is no real story behind all this pointless mayhem, although there was a good idea. The purpose was to show a ruthless telepath—only one—trying to take over the world and run it as he wishes. If ruthless enough, such a telepath could certainly do it, and the story might have been fascinating.

But here it is so buried in blood, bruises, cut lips, knockouts, "stungunned" roughs, tortures and murders that before long you realize it's an evasion instead of a plot.

DROME by John Martin Leahy. Fantasy Publishing Co., Inc., Los Angeles, 1952. 295 *pages,* $3.00

MEET one of those varicosed imitations of A. Merritt that proliferated during the 1920s and that always made Merritt, a pretty purple writer himself, seem restrained.

Drome is one of the poorest of the imitations—weak in concept, in plot, in characterizations, in style of writing. There is literally no reason for its being hauled lifeless out of the obscurity of the magazine files.

Briefly, *Drome* tells of one more underworld, this one entered through a crevasse in the upper reaches of Mount Rainier in the state of Washington. By page 212, one has still not reached Drome and boredom has set in. It is not relieved until page 295, which is where the book ends.

—GROFF CONKLIN

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Sentimentalists

RHADAMPSICUS and Nodalictha were on their honeymoon, and consequently they were sentimental. To be sure, it would not have been easy for humans to imagine sentiment as existing between them. Humans would hardly associate tenderness with glances cast from sets of sixteen eyes mounted on jointed eye stalks,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

By MURRAY LEINSTER

You do not always have to go looking for a guardian angel. He may be looking for you — but perhaps for somebody else's benefit!

Illustrated by HUNTER

nor link langorous thrills with a coy mingling of positronic repulsion blasts—even when the emission of positron blasts from beneath one's mantle was one's normal personal mode of locomotion. And when two creatures like Rhadampsicus and Nodalictha stood on what might be roughly described as their heads and twined their eye stalks together, so that they gazed fondly at each other with all sixteen eyes at once, humans would not have thought of it as the equivalent of a loving kiss. Humans would have screamed and run—if they were not paralyzed by the mere sight of such individuals.

Nevertheless, they were a very happy pair and they were very sentimental, and it was probably

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a good thing, considered from all angles. They were still newlyweds on their wedding tour—they had been married only seventy-five years before—when they passed by the sun that humans call Cetis Gamma.

Rhadampsicus noted its peculiarity. He was anxious, of course, for their honeymoon to be memorable in every possible way. So he pointed it out to Nodalictha and explained what was shortly to be expected. She listened with a bride's rapt admiration of her new husband's wisdom. Perceiving his scientific interest, she suggested shyly that they stop and watch.

RHADAMPSICUS scanned the area. There were planets—inner ones, and then a group of gas giants, and then a very cosy series of three outer planets with surface temperatures ranging from three to seven degrees Kelvin.

They changed course and landed on the ninth planet out, where the landscape was delightful. Rhadampsicus unlimbered his traveling kit and prepared a bower. Nitrogen snow rose and swirled and consolidated as he deftly shifted force-pencils. When the tumult subsided, there was a snug if primitive cottage for the two of them to dwell in while they waited for Cetis Gamma to accomplish its purpose.

Nodalictha cried out softly when she entered the bower. She was fascinated by its completeness. There was even running liquid hydrogen from a little rill nearby. And over the doorway, as an artistic and appropriate touch, Rhadampsicus had put his own and Nodalictha's initials, pricked out in amber chlorine crystals and intertwined within the symbol which to them meant a heart. Nodalictha embraced him fondly for his thoughtfulness. Of course, no human would have recognized it as an embrace, but that did not matter.

Happily, then, they settled down to observe the phenomenon that Cetis Gamma would presently display. They scanned the gas giant planets together, and then the inner ones.

On the second planet out from the sun, they perceived small biped animals busily engaged in works of primitive civilization. Nodalictha was charmed. She asked eager questions, and Rhadampsicus searched his memory and told her that the creatures were not well known, but had been observed before. Limited in every way by their physical constitution, they had actually achieved a form of space travel by means of crude vehicles. He believed, he said, that the name they called themselves was "men."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE sun rose slowly in the east, and Lon Simpson swore patiently as he tried for the eighteenth time to get the generator back again in a fashion to make it work. His tractor waited in the nearby field. The fields waited. Over in Cetopolis, the scales and storesheds waited, and somewhere there was doubtless a cargo ship waiting for a spacegram to summon it to Cetis Gamma Two for a load of *thanar* leaves. And of course people everywhere waited for *thanar* leaves.

A milligram a day kept old age away—which was not an advertising slogan but sound, practical geriatric science. But *thanar* leaves would only grow on Cetis Gamma Two, and the law said that all habitable planets had to be open for colonization and land could not be withheld from market.

There was too much population back on Earth, anyhow. Therefore the Cetis Gamma Trading Company couldn't make a planetwide plantation and keep *thanar* as a monopoly, but could only run its own plantation for research and instruction purposes for new colonists. Colonists had to be admitted to the planet, and they had to be sold land. But there are ways of getting around every law.

Lon Simpson swore. The Diesel of his tractor ran a generator. The generator ran the motors in the tractor's catawheels. But this was the sixth time in a month that the generator had broken down, and generators do not break down.

Lon put it together for the eighteenth time this breakdown, and it still wouldn't work. There was nothing detectably wrong with it, but he couldn't make it work.

Seething, he walked back to his neat, prefabricated house. He picked up the beamphone. Even Cathy's voice at the exchange in Cetopolis could not soothe him, he was so furious.

"Cathy, give me Carson—and don't listen!" he said tensely.

He heard clickings on the two-way beam.

"My generator's gone," he said sourly when Carson answered. "I've repaired it twice this week. It looks like it was built to stop working! What is this all about, anyhow?"

The representative of the Cetis Gamma Trading Company sounded bored.

"You want a new generator sent out?" he asked without interest. "Your crop credit's still all right—if the fields are in good shape."

"I want machinery that works!" Lon Simpson snapped. "I want machinery that doesn't

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

have to be bought four times over a growing season! And I want it at a decent price!"

"Look, those generators come out from Earth. There's freight on them. There's freight on everything that comes out from Earth. You people come to a developed planet, you buy your land, your machinery, your house, and you get instruction in agriculture. Do you want the company to tuck you in bed at night besides? Do you want a new generator or not?"

"How much?" demanded Lon. When Carson told him, he hit the ceiling. "It's robbery! What'll I have left for my crop if I buy that?"

CARSON'S voice was still bored. "If you buy it and your crop's up to standard, you'll owe the crop plus three hundred credits. But we'll stake you to next growing season."

"And if I don't?" demanded Lon. "Suppose I don't give you all my work for nothing and wind up in debt?"

"By contract," Carson told him, "we've got the right to finish cultivating your crop and charge you for the work because we've advanced you credit on it. Then we attach your land and house for the balance due. And you get no more credit at the Company stores. And passage off this planet has to be paid for in cash." He yawned. "Don't answer now," he said without interest. "Call me back after you calm down. You'd only have to apologize."

Lon Simpson heard the click as he began to describe, heatedly, what was in his mind. He said it anyhow. Then Cathy's voice came from the exchange. She sounded shocked but sympathetic.

"Lon! Please!"

He swallowed a particularly inventive description of the manners, morals and ancestry of all the directors and employees of the Cetis Gamma Trading Company. Then he said, still fuming, "I told you not to listen!"

His wrongs overcame him again. "It's robbery! It's peonage! They've got every credit I had! They've got three-quarters of the value of my crop charged up for replacements of the lousy machinery they sold me—and now I'll end the growing season in debt! How am I going to ask you to marry me?"

"Not over a beamphone, I hope," said Cathy.

He was abruptly sunk in gloom.

"That was a slip," he admitted. "I was going to wait until I got paid for my crop. It looked good. Now—"

"Wait a minute, Lon," Cathy said. There was silence. She gave somebody else a connection.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The phone-beams from the colony farms all went to Cetopolis and Cathy was one of the two operators there. If or when the colony got prosperous enough, there would be a regular intercommunication system. So it was said. Meanwhile, Lon had a suspicion that there might be another reason for the antiquated central station.

Cathy said brightly, "Yes, Lon?"

"I'll come in to town tonight," he said darkly. "Date?"

"Y-yes," stammered Cathy. "Oh, yes!"

He hung up and went back out to the field and the tractor. He began to think sourly of a large number of things all at once. There was a law to encourage people to leave Earth for colonies on suitable planets. There was even governmental help for people who didn't have funds of their own. But if a man wanted to make something of himself, he preferred to use his own money and pick his own planet and choose his own way of life.

Lon Simpson had bought four hectares of land on Cetis Gamma Two. He'd paid his passage out. He'd given five hundred credits a month for an instruction course on the Company's plantation, during which time he'd labored faithfully to grow, harvest, and cure *thanar* leaves for the Company's profit. Then he'd bought farm machinery from the Company—and a house—and very painstakingly had set out to be a colonist on his own.

JUST about that time, Cathy had arrived on a Company ship and taken up her duties as beamphone operator at Cetopolis. It was a new colony, with not more than five thousand humans on the whole planet, all of them concentrated near the one small town with its plank sidewalks and prefabricated buildings. Lon Simpson met Cathy, and his labors on his *thanar* farm acquired new energy and purpose.

But he was up against a shrewd organization. His inordinately expensive farm machinery broke down. He repaired it. After a time it could not be repaired any longer and he had to buy more. Before the *thanar* plants were half grown, he owed more than half his prospective crop for machinery replacements.

Now he could see the method perfectly. The Company imported all machinery. It made that machinery in its own factories, machinery that was designed to break down. So this year—even if nothing else happened—Lon would wind up owing more for machinery replacements than the crop would bring.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

It was not likely that nothing else would happen. Next season he would start off in debt, instead of all clear, and if the same thing happened he would owe all his crop and be six thousand credits behind. By harvest after next, his farm and house could be foreclosed for debt and he could either try to work for other colonists—who were in the process of going through the same wringer themselves—or hire out as a farmhand on the Company's plantation. He would never be able to save space-fare away from the planet. He would be very much worse off than the assisted emigrants to other planets, who had not invested all they owned in land and machinery and agricultural instructions.

And there was Cathy. She owed for her passage. It would be years before she could pay that back, if ever. She couldn't live in the farmhand barracks. They might as well give up thinking about each other.

It was a system. Beautifully legal, absolutely airtight. Not a thing wrong with it. The Company had a monopoly on *thanar*, despite the law. It had all the cultivated land on Cetis Gamma Two under its control, and its labor problem was solved. Its laborers first paid something like sixteen thousand credits a head for the privilege of trying to farm independently for a year or two, and then became farmhands for the Company at a bare subsistence wage.

Lon Simpson was in the grip of that system. He had taken the generator apart and put it back together eighteen times. There was nothing visibly wrong with it. It had been designed to break down with nothing visibly wrong with it. If he couldn't repair it, though, he was out fifteen hundred credits, his investment was wiped out, and all his hopes were gone.

He took the generator apart for the nineteenth time. He wondered grimly how the Company's designers made generators so cleverly that they would stop working so that even the trouble with them couldn't be figured out. It was a very ingenious system.

OUT on the ninth planet, Rhadampsicus explained the situation to his bride as they waited for the interesting astronomical phenomenon. They were quite cosy, waiting. Their bower was simple, of course. Frozen nitrogen walls, and windows of the faint bluish tint of oxygen ice. Rhadampsicus had grown some cyanogen flower-crystals to make the place look homelike, and there was now a lovely reflection-pool in which liquid hydrogen reflected the stars. Cetis Gamma,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the local sun, seemed hardly more than a very bright and very near star—it was four light-hours away—and it glimmered over the landscape and made everything quite charming.

Nodalictha, naturally, would not enter the minds of the male bipeds on the inner planet. Modesty forbade such a thing—as, of course, the conscientiousness of a brand-new husband limited Rhadampsicus to the thoughts of the males among the bipeds. But Nodalictha was distressed when Rhadampsicus told her of what was occurring among the bipeds. He guided her thoughts to Cathy, in the beamphone exchange at Cetopolis.

"But it is terrible!" said Nodalictha in distress when she had absorbed Cathy's maiden meditations. She did not actually speak in words and soundwaves. There is no air worth mentioning at seven degrees Kelvin. It's all frozen. A little helium hangs around, perhaps. Nothing else. The word for communication is not exactly the word for speech, but it will do. Nodalictha said, "They love each other! In a cute way, they are like—like we were, Rhadampsicus!"

Rhadampsicus played a positron-beam on her in feigned indignation. If that beam had hit a human, the human would have curled up in a scorched, smoking heap. But Nodalictha bridled.

"Rhadampsicus!" she protested fondly. "Stop tickling me! But can't you do something for them? They are so cute!"

And Rhadampsicus gallantly sent his thoughts back to the second planet, where a biped grimly labored over a primitive device.

LON Simpson, staring at the disassembled generator, suddenly blinked. The grimness went out of his expression. He stared. An idea had occurred to him. He went over it in his mind. He blew out his breath in a long whistle. Then, very painstakingly, he did four or five things that completely ruined the generator for the extremely modest trade-in allowance he could have gotten for it at the Company store.

He worked absorbedly for perhaps twenty minutes, his eyes intent. At the end of that time he had threads of unwound secondary wire stretched back and forth across a forked stick of *dhil* weed, and two small pieces of sheet iron twisted together in an extremely improbable manner. He connected the ends of the secondary wire to contacts in his tractor. He climbed into the tractor seat. He threw over the drive control.

The tractor lurched into motion. The Diesel wasn't running. But the tractor rolled comfort-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ably as Lon drove it, the individual motors in the separate catawheels drawing power from a mere maze of wires across a forked stick—plus two pieces of sheet iron. There was plenty of power.

Lon drove the tractor the rest of the morning and all afternoon with a very peculiar expression on his face. He understood what he had done. Now that he had done it, it seemed the most obvious of expedients. He felt inclined to be incredulous that nobody had ever happened to think of this particular device before. But they very plainly hadn't. It was a source of all the electric power anybody could possibly want. The voltage would depend on the number of turns of copper wire around a suitably forked stick. The amperage would be whatever that voltage could put through whatever was hooked to it.

He no longer needed a new generator for his tractor. He had one.

He didn't even need a Diesel.

With adequate power — he'd been having to nurse the Diesel along, too, lately—Lon Simpson ran his tractor late into the twilight. He cultivated all the ground that urgently needed cultivation, and at least one field he hadn't hoped to get to before next week. But his expression was amazed. It is a very peculiar sensation to discover that one is a genius.

THAT night, in Cetopolis, he told Cathy all about it. It was a very warm night—an unusually warm night. They walked along the plank sidewalks of the little frontier town—as a new colony, Cetis Gamma Two was a frontier—and Lon talked extravagantly.

He had meant to explain painfully to Cathy that there was no use in their being romantic about each other. He'd expected to have to tell her bitterly that he was doomed to spend the rest of his life adding to the profits of the Cetis Gamma Trading Company, with all the laws of the human race holding him in peonage. He'd thought of some very elegant descriptions of the sort of people who'd worked out the system in force on Cetis Gamma Two.

But he didn't. As they strolled under the shiver trees that lined the small town's highways, and smelled the *chanel* bushes beyond the town's limits, and listened to the thin violinlike strains of what should have been night birds—they weren't; the singers were furry instead of feathered, and they slept in burrows during the day—as they walked with linked fingers in the warm and starlit night, Lon told Cathy about his invention.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

He explained in detail just why wires wound in just that fashion, and combined with bits of sheet iron twisted in just those shapes, would produce power for free and forever. He explained how it had to be so. He marveled that nobody had ever thought of it before. He explained it so that Cathy could almost understand it.

"It's wonderful!" she said wistfully. "They'll run spaceships on your invention, won't they, Lon? And cities? And everything! I guess you'll be very rich for inventing it!"

He stopped short and stared at her. He hadn't thought that far ahead. Then he said blankly:

"But I'll have to get back to Earth to patent it! And I haven't got the money to pay one fare, let alone two!"

"Two?" asked Cathy hopefully. "Why two?"

"You're going to marry me, aren't you?" he demanded. "I sort of hope that was all settled."

Cathy stamped her foot.

"Hadn't you heard," she asked indignantly, "that such things aren't taken for granted? Especially when two people are walking in the starlight and are supposed to be thrilled? It isn't settled—not until after you've kissed me, anyhow!"

He remedied his error.

OUT on the ninth planet, very far away, Nodalictha blushed slightly. As a bride, she was in that deliciously embarrassing state of becoming accustomed to discussions which would previously have been unconventional.

"They are so quaint!" Then she hesitated and said awkwardly, "The idea of putting their—their lips together as a sign of affection—"

Rhadampsicus was amused, as a bridegroom may be by the delightful innocences of a new wife. He evinced his amusement in a manner no human being could conceivably have recognized as the tender laugh it was.

"Little goose!" he said fondly. Of course, instead of a fowl, he thought of a creature that had thirty-four legs and scales instead of feathers and was otherwise thoroughly ungooselike. "Little goose, they do that because they can't do this!"

And he twined his eye stalks sentimentally about hers.

DAYS passed on Cetis Gamma Two. Lon Simpson cultivated his *thanar* fields. But he began to worry. His new power source was more than a repair for a broken-down tractor. It was valuable. It was riches! He had in it one of those basic, overwhelmingly important discoveries by which human beings have

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

climbed up from the status of intelligent Earthbound creatures to galactic colonists— And a lot of good it had done them!

It was a basic principle for power supply that would relieve mankind permanently of the burden of fuels. The number of planets available for colonization would be multiplied. The cost of every object made by human beings would be reduced by the previous cost of power. The price of haulage from one planet to another would be reduced to a fraction. Every member of the human race would become richer as a result of the gadget now attached to Lon Simpson's tractor. He was entitled to royalties on the wealth he was to distribute. But . . .

He was a *thanar* farmer on Cetis Gamma Two. His crop was mortgaged. He could not possibly hope to raise enough money to get back to Earth to arrange for the marketing of his invention. Especially, he could not conceivably raise money enough to take Cathy with him. He had riches, but they weren't available. And something else might happen to ruin him at any time.

Something else did. The freezer element of his deep-freeze locker broke down. He didn't notice it. He had a small kitchen locker in which food for week-to-week use was stored. He didn't know anything about the deep-freeze unit that held a whole growing season's supply of food. The food in it—all imported from Earth and very expensive—thawed, fermented, spoiled, developed evil smelling gases, and waited for an appropriate moment to reveal itself as a catastrophe.

There were other things to worry about at the time. A glacier up at Cetis Gamma Two's polar region began to retreat, instead of growing as was normal for the season. There was a remarkable solar prominence of three days' duration swinging around the equator of the local sun. There was a meeting of directors of the Cetis Gamma Trading Company, at which one of the directors pointed out that the normal curve of increase for profits was beginning to flatten out, and something had to be done to improve the financial position of the company. Ugly sun-spots appeared on the northern hemisphere of Cetis Gamma. If there had been any astronomers on the job, there would have been as much excitement as a four alarm fire. But there were no astronomers.

The greatest agitation on the second planet of Cetis Gamma Two was felt by Lon Simpson. Cathy had made friends with a married woman colonist who would chaperon her on a visit to Lon's farm, and was coming

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

out to visit and see the place that was to be the scene of the ineffable, unparalleled happiness she and Lon would know after they were married.

She came, she saw, she was captivated. Lon blissfully opened the door of the house she was to share. He had spent the better part of two days cleaning up so it would be fit for her to look at. Cathy entered. There was a dull, booming noise, a hissing, and a bubbling, and then a rank stench swept through the house and strangled them.

THE boom, of course, was the bursting open of the deep-freeze locker from the pressure of accumulated gases within it. The smell was that of the deep-freeze contents, ten days thawed out without Lon knowing it. There are very few smells much worse than frozen fish gone very, very bad in a hot climate. If there are worse smells, they come from once-frozen eggs bursting from their shells when pressure outside them is relieved. In this case, trimmings were added by fermenting strawberries, moldy meat and badly decayed vegetables, all triumphantly making themselves known at the same instant.

Cathy gasped and choked. Lon got her out of doors, gasping himself. It was not difficult to deduce what had happened.

He opened the house windows from the outside, so the smell could go away. But he knew despair.

"I—can't show you the house, Cathy," he said numbly. "My locker went bad and all the food followed suit."

"Lon!" wailed Cathy. "It's terrible! How will you eat?"

Lon began to realize that the matter was more serious than the loss of an opportunity for a sentimental inspection of the house. He had dreamed splendidly, of late. He didn't quite know how he was going to manage it, but since his tractor was working magnificently he had come to picture himself and Cathy in the rôle of successful colonists, zestfully growing *thanar* leaves for the increasing multitudes of people who needed a milligram a day.

He'd reverted to the pictured dreams in the Cetis Gamma Trading Company's advertisements. He'd daydreamed of himself and Cathy as growing with the colony, thriving as it throve, and ultimately becoming moderately rich—in children and grandchildren, anyhow—with life stretching out before them in a sort of rosy glow. He'd negligently assumed that somehow they would also be rich from the royalties on his invention. But now he came down to reality.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

His house was uninhabitable for the time being. He could continue to cultivate his fields, but he wouldn't be able to eat. The local plant-life was not suitable for human digestion. He had to live on food imported from Earth. Now he had to buy a new stock from the Company, and it would bankrupt him.

With an invention worth more —probably—than the Cetis Gamma Company itself, if he could realize on it, he still was broke. His crop was mortaged. If Carson learned about his substitute for a generator, the Company would immediately clamp down to get it away from him.

He took Cathy back to Cetopolis. He feverishly appealed to other colonists. He couldn't tell them about his generator substitute. If they knew about it, in time Carson would know. If they used it, Carson would eventually get hold of a specimen, to send back to Earth for pirating by the Cetis Gamma Trading Company. All Lon could do was try desperately to arrange to borrow food to live on until his crop came in, though even then he wouldn't be in any admirable situation.

He couldn't borrow food in quantity. Other colonists had troubles, too. They'd give him a meal, yes, but they couldn't refill his freezer without emptying their own. Which would compel them to buy more. Which would be charged against their crops. Which would simply hasten the day when they would become day-laborers on the Company's *thanar* farm.

Lon had about two days' food in the kitchen locker. He determined to stretch it to four. Then he'd have to buy more. With each meal, then, his hopes of freedom and prosperity—and Cathy—grew less.

Of course, he could starve . . .

RHADAMPSICUS was enormously and pleasantly interested in what went on in Cetis Gamma's photosphere. From the ninth planet, he scanned the prominences with enthusiasm, making notes. Nodalictha tried to take a proper wifely interest in her husband's hobby, but she could not keep it up indefinitely. She busied herself with her housekeeping. She fashioned a carpet of tufted methane fibres and put up curtains at the windows. She enlarged the garden Rhadampsicus had made, adding borders of crystallized ammonia and a sort of walkway with a hedge of monoclinic sulphur which glittered beautifully in the starlight. She knew that this was only a temporary dwelling, but she wanted Rhadampsicus to realize that she could make any

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

place a comfortable home.

He remained absorbed in the phenomena of the local sun. One great prominence, after five days of spectacular existence, divided into two which naturally moved apart and stationed themselves at opposite sides of the sun's equator. They continued to rotate with the sun itself, giving very much the effect of an incipient pinwheel. Two other minor prominences came into being midway between them. Rhadampsicus watched in fascination.

Nodalictha came and reposed beside him on a gentle slope of volcanic slag. She waited for him to notice her. She would not let herself be sensitive about his interest in his hobby, of course, but she could not really find it absorbing for herself. A trifle wistfully, she sent her thoughts to the female biped on the second planet.

After a while she said in distress, "Rhadampsicus! Oh, they are so unhappy!"

Rhadampsicus gallantly turned his attention from the happenings on the sun.

"What's that, darling?"

"Look!" said Nodalictha plaintively. "They are so much in love, Rhadampsicus! And they can't marry because he hasn't anything edible to share with her!"

Rhadampsicus scanned. He was an ardent and sentimental husband. If his new little wife was distressed about anything at all, Rhadampsicus was splendidly ready to do something about it.

LON SIMPSON looked at his kitchen locker. The big deep-freezer was repaired now. Once a season, a truck came out from Cetopolis and filled it. The food was costly. A season's supply was kept in deep-freeze. Once in one or two weeks, one refilled the kitchen locker. It was best to leave the deep-freeze locker closed as much as possible. But now the big deep-freeze was empty. He'd cleaned out the ghastly mess in it, and he had it running again, but he had nothing to put in it. To have it refilled would put him hopelessly at the Company's mercy, but there was nothing else to do.

Bitterly, he called the Trading Company office, and Carson answered.

"This is Simpson," Lon told him. "How much—"

"The price for a generator," said Carson, bored, "is the same as before. Do you want it sent out?"

"No! My food locker broke down. My food store spoiled. I need more."

"I'll figure it," replied Carson

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

over the beamphone. He didn't seem interested. After a moment, he said indifferently, "Fifteen hundred credits for standard rations to crop time. Then you'll need more."

"It's robbery!" raged Lon. "I can't expect more than four thousand credits for my crop! You've got three thousand charged against me now!"

Carson yawned. "True. A new generator, fifteen hundred; new food supplies fifteen hundred. If your crop turns out all right, you'll start the new season with two thousand credits charged up as a loan against your land."

Lon Simpson strangled on his fury. "You'll take all my leaves and I'll still owe you! Then credit for seed and food and—If I need to buy more machinery, you'll own my farm *and* crop next crop time! Even if my crop is good! Your damned Company will own my farm!"

"That's your lookout," Carson said without emotion. "Being a *thanar* farmer was your idea, not mine. Shall I send out the food?"

Lon Simpson bellowed into the beamphone. He heard clicking, then Cathy's voice. It was at once reproachful and sympathetic.

"Lon! Please!"

BUT Lon couldn't talk to her. He panted at her, and hung up. It is essential to a young man in love that he shine, somehow, in the eyes of the girl he cares for. Lon was not shining. He was appearing as the Galaxy's prize sap. He'd invested a sizable fortune in his farm. He was a good farmer—hard-working and skilled. In the matter of repairing generators, he'd proved to be a genius. But he was at the mercy of the Cetis Gamma Company's representative. He was already in debt. If he wanted to go on eating, he'd go deeper. If he were careful and industrious and thrifty, the Trading Company would take his crop and farm in six more months and then give him a job at day-labor wages.

He went grimly to the kitchen of his home. He looked at the trivial amount of food remaining. He was hungry. He could eat it all right now.

If he did—

Then, staring at the food in the kitchen locker, he blinked. An idea had occurred to him. He was blankly astonished at it. He went over and over it in his mind. His expression became dubiously skeptical, and then skeptically amazed. But his eyes remained intent as he thought.

Presently, looking very skeptical indeed, he went out of the house and unwound more copper wire from the remnant of the disassembled generator. He came back to the kitchen. He took an

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

emptied tin can and cut it in a distinctly peculiar manner. The cuts he made were asymmetrical. When he had finished, he looked at it doubtfully.

A long time later he had made a new gadget. It consisted of two open coils, one quite large and one quite small. Their resemblance to each other was plain, but they did not at all resemble any other coils that had been made for any other purpose whatsoever. If they looked like anything, it was the "mobiles" that some sculptors once insisted were art.

Lon stared at his work with an air of helplessness. Then he went out again. He returned with the forked stick that had proved to be a generator. He connected the wires from that improbable contrivance to the coils of the new and still more unlikely device. The eccentrically cut tin can was in the middle, between them.

There was a humming sound. Lon went out a third time and came back with a mass of shrubbery. He packed it in the large coil.

He muttered to himself, "I'm out of my head! I'm crazy!"

But then he went to the kitchen locker. He put a small packet of frozen green peas in the tin can between the two coils.

The humming sound increased. After a moment there was another parcel of green peas—not frozen—in the small coil.

Lon took it out. The device hummed more loudly again. Immediately there was another parcel of green peas in the small coil. He took them out.

When he had six parcels of green peas instead of one, the mass of foliage in the large coil collapsed abruptly. Lon disconnected the wires and removed the debris. The native foliage looked shrunken, somehow, dried-out. Lon tossed it through the window.

HE put a parcel of unfrozen green peas on to cook and sat down and held his head in his hands. He knew what had happened. He knew how.

The local flora on Cetis Gamma Two naturally contained the same chemical elements as the green peas imported from Earth. Those elements were combined in chemical compounds similar, if not identical to, those of the Earth vegetation. The new gadget simply converted the compounds in the large coil to match those in the sample—in the tin can—and assembled them in the small coil according to the physical structure of the sample. In this case, as green peas.

The device would take any approximate compound from the large coil and reassemble it—

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

suitably modified as per sample —in the small coil. It would work not only for green peas, but for roots, barks, herbs, berries, blossoms and flowers.

It would even work for *thanar* leaves.

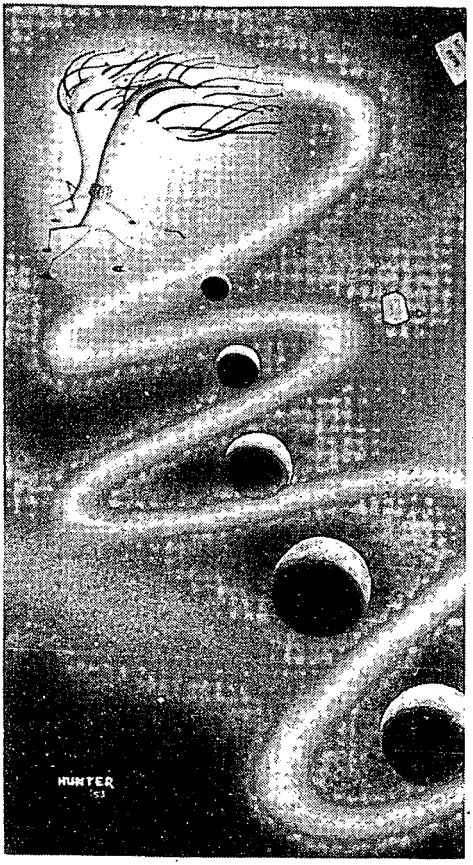
When that last fact occurred to him, Lon Simpson went quietly loony, trying to figure out how he had come to think of such a thing. He was definitely crocked, because he picked up the beamphone and told Cathy all about it. And he was not loony because he told Cathy, but because he forgot his earlier suspicions of why there was a central station for beamphones in Cetopolis, instead of a modern direct-communication system.

In fact, he forgot the system in operation on Cetis Gamma Two —the Company's system. It had been designed to put colonists through the wringer and deposit them at its own farm to be day-laborers forever with due regard to human law. But it was a very efficient system.

It took care of strokes of genius, too.

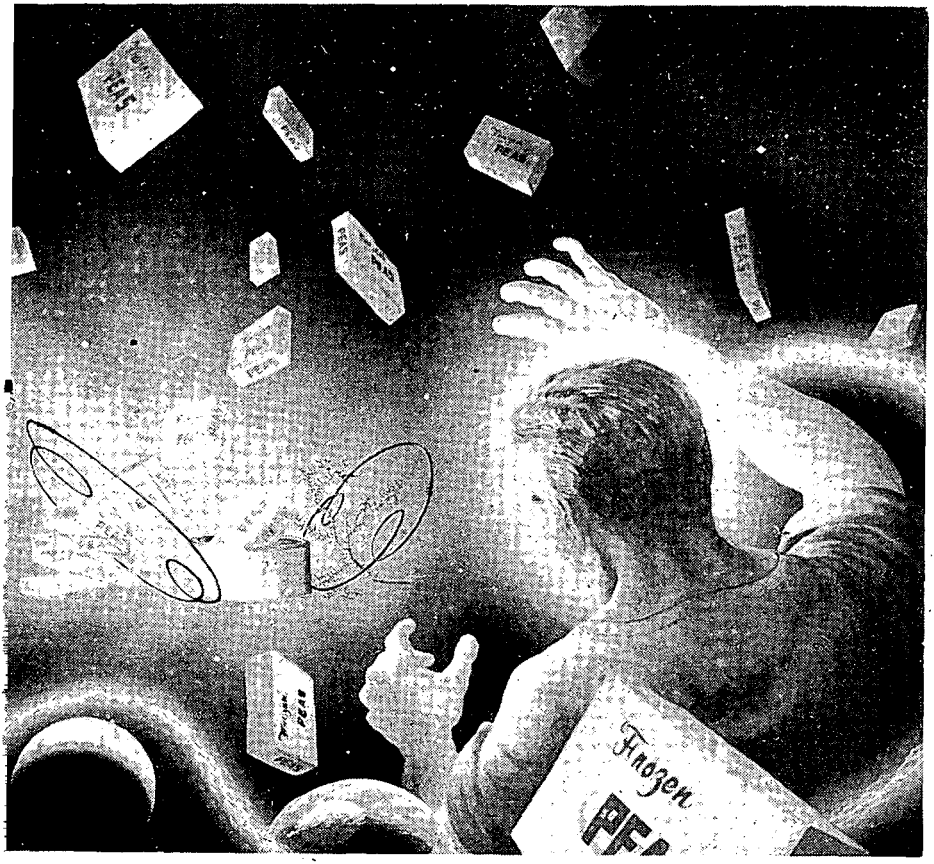
That night, Carson, listening boredly to the record of all the conversations over the beamphone during the day, heard what Lon had told Cathy. He didn't believe it, of course.

But he made a memo to look into it.



RHADAMPSICUS stretched himself. Out on the ninth planet, the weather was slightly warmer—almost six degrees Kelvin, two hundred and sixty-odd degrees centigrade below zero—and he was inclined to be lazy. But he was very handsome, in Nodalictha's eyes. He was seven-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



ty or more feet from his foremost eye stalk to the tip of his least crimson appendage, and he fluoresced beautifully in the starlight. He was a very gallant young bridegroom.

When he saw Nodalictha looking at him admiringly, he said with his customary tenderness:

"It was fatiguing to make him go through it, darling, but since you wished it, it is done. He now has food to share with the female."

"And you're handsome, too, Rhadampsicus!" Nodalictha said irrelevantly.

She felt as brides sometimes do

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

on their honeymoons. She was quite sure that she had not only the bravest and handsomest of husbands, but the most thoughtful and considerate.

Presently, with their eye stalks intertwined, he asked softly:

"Are you weary of this place, darling? I would like to watch the rest of this rather rare phenomenon, but if you're not interested, we can go on. And truly I won't mind."

"Of course we'll stay!" protested Nodalictha. "I want to do anything you want to. I'm perfectly happy just being with you."

And, unquestionably, she was.

CARSON, though bored, was a bit upset by the recorded conversation he'd listened to. Lon Simpson had been almost incoherent, but he obviously meant Cathy to take him seriously. And there were some things to back it up.

He'd reported his generator hopelessly useless—and hadn't bought a new one. He'd reported all his food spoiled—and hadn't bought more. Carson thought it over carefully. The crop inspection helicopter reported Simpson's fields in much better shape than average, so his tractor was obviously working.

Carson asked casual, deadpan questions of other colonists who came into the Company store. Most of them were harried, sullen and bitter. They were unanimously aware of the wringer they were being put through. They knew what the Company was doing to them and they hated Carson because he represented it. But they did answer Carson's casual questions about Lon Simpson.

Yes, he'd tried to borrow food from them. No, they couldn't lend it to him. Yes, he was still eating. In fact he was offering to swap food. He was short on fruit and long on frozen green peas. Then he was long on fruit and frozen green peas and short on frozen sweet corn and strawberries. No, he didn't want to trade on a big scale. One package of frozen strawberries was all he wanted. He gave six packages of frozen peas for it. He gave six packages of frozen strawberries for one package of frozen sweet corn. He'd swapped a dozen parcels of sweet corn for one of fillet of flounder, two dozen fillet of flounder for cigarettes, and fifty cartons of cigarettes for a frozen roast of beef.

It didn't make sense unless the conversation on the beamphone was right. If what Lon had told Cathy was true, he'd have his frozen food locker filled up again by now. He had some sort of device which converted the indi-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

gestible local flora and fauna into digestible Earth products. To suspect such a thing was preposterous, but Carson suspected everyone and everything.

As representative of the Company, Carson naturally did its dirty work. New colonists bought farms from the central office on Earth and happily took ship to Cetis Gamma Two. Then Carson put them through their instruction course, outfitted them to try farming on their own, and saw to it that they went bankrupt and either starved or took jobs as farmhands for the Company, at wages assuring that they could never take ship away again.

It was a nasty job and Carson did it very well, because he loved it.

While he still debated Lon's insane boasts to Cathy over the beamphone system, he prepared to take over the farm of another colonist. That man had been deeper in debt than Lon, and he'd been less skilled at repairs, so it was time to gather him in. Carson called him to Cetopolis to tell him that the Company regretfully could not extend further credit, would have to take back his farm, house, and remaining food stores, and finish the cultivation of his *thanar* leaf crop to repay itself for the trouble.

The colonist, however, said briefly: "Go to hell."

HE started to leave Carson's air-cooled office. Carson said mildly:

"You're broke. You'll want a job when you haven't got a farm. You can't afford to tell me to go to hell."

"You can't take my farm unless my fields are neglected," the colonist said comfortably. "They aren't. And my *thanar* leaf crop is going to be a bumper one. I'll pay off all I owe—and we colonists are planning to start a trading company of our own, to bring in good machinery and deal fairly."

Carson smiled coldly.

"You forget something," he said. "As representative of the Trading Company, I can call on you to pay up all your debts at once, if I have reason to think you intend to try to evade payment. I do think so. I call on you for immediate payment in full. Pay up, please!"

This was an especially neat paragraph in the fine print of the colonists' contract with the Company. Any time a colonist got obstinate he could be required to pay all he owed, on the dot. And if he had enough to pay, he wouldn't owe. So the Trading Company could ruin anybody.

But this colonist merely grinned.

"By law," he observed, "you have to accept *thanar* leaves as

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

legal tender, at five credits a kilo. Send out a truck for your payment. I've got six tons in my barn, all ready to turn in."

He made a most indecorous gesture and walked out. A moment later, he put his head back in.

"I forgot," he commented politely. "You said I couldn't afford to tell you to go to hell. With six tons of *thanar* leaves on hand, I'm telling you to—"

He added several other things, compared to which telling Carson to go to hell was the height of courtesy. He went away.

Carson went a little pale. It occurred to him that this colonist was a close neighbor of Lon Simpson. Maybe Lon had gotten tired of converting *dhil* weed and shiver leaves into green peas and asparagus, and had gotten to work turning out *thanar*.

CARSON went to Lon's farm. It was a very bad road, and any four-wheeled vehicle would have shaken itself to pieces on the way. The gyrocar merely jolted Carson severely. The jolting kept him from noticing how hot the weather was. It was really extraordinarily hot, and Carson suffered more because he spent most of his time in an air-conditioned office. But for the same reason he did not suspect anything abnormal.

When he reached Lon's farm, he noticed that the *thanar* leaves were growing admirably. For a moment, sweating as he was, he was reminded of tobacco plants growing on Maryland hillsides. The heat and the bluish-green color of the plants seemed very familiar. But then a cateagle ran hastily up a tree, out on a branch, and launched its crimson furry self into midair. That broke the spell of supposedly familiar things.

Carson turned his gyrocar in at Lon Simpson's house. There were half a dozen other colonists around. Two of them drove up with farm trucks loaded with mixed foliage. They had pulled up, cut off and dragged down just about anything that grew, and loaded their truck with it. Two other colonists were loading another cart with *thanar* leaves, neatly bundled and ready for the warehouse.

They regarded Carson with pleased eyes. Carson spoke severely to Cathy.

"What are you doing here? You're supposed to be on duty at the beamphone exchange! You can be discharged—"

Lon Simpson said negligently, "I'm paying her passage. By law, anybody can pay the passage of any woman if she intends to marry him, and then her contract with the company is ended.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

They had rules like that in ancient days—only they used to pay in tobacco instead of *thanar* leaves."

Carson gulped. "But how will you pay her fare?" He asked sternly. "You're in debt to the Company yourself."

Lon Simpson jerked his thumb toward his barn. Carson turned and looked. It was a nice-looking barn. The aluminum siding set it off against a backing of shiver trees, *dhil* and giant *sketit* growth. Carson's eyes bugged out. Lon's barn was packed so tightly with *thanar* leaves that they bulged out the doors.

"I need to turn some of that stuff in, anyhow," said Lon pleasantly. "I haven't got storage space for it. By law you have to buy it at five credits a kilo. I wish you'd send out and get some. I'd like to build up some credit. Think I'll take a trip back to Earth."

At this moment, there was a very peculiar wave of heat. It was not violent, but the temperature went up about four degrees—suddenly, as if somebody had turned on a room heater.

But still nobody looked up at the sun.

RATTLED, Carson demanded furiously if Lon had converted other local foliage into *thanar* leaves, as he'd made his green peas and the other stuff he'd told Cathy about on the beamphone. Lon tensed, and observed to the other colonists that evidently all beamphones played into recorders. The atmosphere became unfriendly. Carson got more rattled still. He began to wave his arms and sputter.

Lon Simpson treated him gently. He took him into the house to watch the converter at work. One of the colonists kept its large coil suitably stuffed with assorted foliage. There was a "hand" of cured, early—best quality—*thanar* leaves in an erratically cut tin can. Duplicates of that hand of best quality *thanar* were appearing in the small coil as fast as they were removed, and fresh foliage was being heaped into the large coil.

"We expect," said Lon happily, "to have a bumper crop of the best grade of *thanar* this year. It looks like every colonist on the planet will be able to pay off his debt to the Company and have credit left over. We'll be sending a committee back to Earth to collect our credits there and organize an independent cooperative trading company that will bring out decent machinery and be a competitive buying agency for *thanar*. I'm sure the Company will be glad to see us all so prosperous."

It was stifling hot by now, but

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

nobody noticed. The colonists were much too interested in seeing Carson go visibly to pieces before them. He was one of those people who seem to have been developed by an all-wise Providence expressly to be underlings for certain types of large corporations. Their single purpose in life is to impress their superiors in the corporation that hires them. But now Carson saw his usefulness ended. Through his failure, in some fashion, the Company's monopoly on *thanar* leaves and its beautiful system of recruiting labor were ruined. He would be discharged and probably blacklisted.

If he had looked up toward the western sky, squinted a little, and gazed directly at the local sun, he would have seen that his private troubles were of no importance at all. But he didn't. He went staggering to his gyrocar and headed back for Cetopolis.

It was a tiny town, with plank streets, a beamphone exchange, and its warehouses over by the spaceport. It was merely a crude and rather ugly little settlement on a newly colonized planet. But it had been the center of an admirable system by which the Cetis Gamma Trading Company got magnificently rich and dispensed *thanar* leaf (a milligram a day kept old age away) throughout all humanity at the very top price the traffic would bear. And the system was shaky now and Carson would be blamed for it.

Behind him, the colonists rejoiced as hugely as Carson suffered. But none of them got the proper perspective, because none of them looked at the sun.

About four o'clock in the afternoon, it got suddenly hotter again, as abruptly as before. It stayed hotter. Something made Cathy look up. There was a thin cloud overhead, just the right thickness to act something like a piece of smoked glass. She could look directly at the sun through it, examine the disk with her naked eye.

But it wasn't a disk any longer. Cetis Gamma was a bulging, irregularly shaped thing twice its normal size. As she looked, it grew larger still.

OUT on the ninth planet, Rhadampsicus was absorbed in his contemplation of Cetis Gamma. With nothing to interfere with his scanning, he could follow the developments perfectly. There had been first one gigantic prominence, then two, which separated to opposite sides of its equator. Then two other prominences began to grow between them.

For two full days, the new prominences grew, and then split,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

so that the sun came to have the appearance of a ball of fire surrounded by a ring of blue-white incandescence.

Then came instability. Flame geysers spouting hundreds of thousands of miles into emptiness ceased to keep their formation. They turned north and south from the equatorial line. The outline of the sun became irregular. It ceased to be round in profile, and even the appearance of a ring around it vanished. It looked—though this would never have occurred to Rhadampsicus—very much like a fiercely glowing gigantic potato. Its evolution of heat went up incredibly. It much more than doubled its rate of radiation.

Rhadampsicus watched each detail of the flare-up with fascinated attention. Nodalictha dutifully watched with him. But she could not maintain her interest in so purely scientific a phenomenon.

When a thin streamer of pure blue-white jetted upward from the sun's pole, attaining a speed of six hundred and ninety-two miles per second, Rhadampsicus turned to her with enthusiasm.

"Exactly in the pattern of a flare-up according to Dhokis' theory!" he exclaimed. "I have always thought he was more nearly right than the modernists. Radiation pressure can build up in a closed system such as the interior of a sun. It can equal the gravitational constant. And obviously it would break loose at the pole."

Then he saw that Nodalictha's manner was one of distress. He was instantly concerned.

"What's the matter, darling?" he asked anxiously. "I didn't mean to neglect you, my precious one!"

Nodalictha did something that would have scared a human being out of a year's growth, but was actually the equivalent of an unhappy, stifled sob.

"I am a beast!" said Rhadampsicus penitently. "I've kept you here, in boredom, while I enjoyed myself watching this sun do tricks. I'm truly sorry, Nodalictha. We will go on at once. I shouldn't have asked you to—"

But Nodalictha said unhappily, "It isn't you, Rhadampsicus. It's me! While you've been watching the star, I've amused myself watching those quaint little creatures on the second planet. I've thought of them as—well, as pets. I've grown fond of them. It was absurd of me—"

"Oh, but it is wonderful of you," said Rhadampsicus tenderly. "I love you all the more for it, my darling. But why are you unhappy about them? I made sure they had food and energy."

"They're going to be burned

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

up!" wailed Nodalictha, "and they're so cute!"

Rhadampsicus blinked his eyes —all sixteen of them. Then he said self-accusingly, "My dear, I should have thought of that. Of course this is only a flare-up, darling . . ." Then he made an impatient gesture. "I see! You would rather think of them as happy, in their little way, than as burned to tiny crisps."

He considered, scanning the second planet with the normal anxiety of a bridegroom to do anything that would remove a cloud from his bride's lovely sixteen eyes.

NIGHT fell on Cetopolis, and with it came some slight alleviation of the dreadfulness that had begun that afternoon. The air was furnacelike in heat and dryness. There was the smell of smoke everywhere. The stars were faint and red and ominous, seen through the smoke that overlay everything. So far, to be sure, breathing was possible. It was even possible to be comfortable in an air-conditioned room. But this was only the beginning.

Lon and Cathy sat together on the porch of his house, after sundown. The other colonists had gone away to their own homes. When the crack of doom has visibly begun, men do queer things. In Cetopolis some undoubtedly got drunk, or tried to. But there were farmers who would spend this last night looking at their drooping crops, trying to persuade themselves that if Cetis Gamma only went back to normal before sunrise, the crops might yet be saved. But none of them expected it.

Off to the south there was an angry reddish glare in the sky. That was vegetation on the desert there, burning. It grew thick as jungle in the rainy season, and dried out to pure dessication in dry weather. It had caught fire of itself from the sun's glare in late afternoon. Great clouds of acrid smoke rose from it to the stars.

Beyond the horizon to the west there was destruction.

Lon and Cathy sat close together. She hadn't even asked to be taken back to Cetopolis, as convention would have required. The sun was growing hotter still while it sank below the horizon, It was expanding in fits and starts as new writhing spouts of stuff from its interior burst the bonds of gravity. Blazing magma flung upward in an unthinkable eruption. The sun had been three times normal size when it set.

Lon was no astronomer, but plainly the end of life on the inner planets of Cetis Gamma was at hand.

Cetis Gamma might, he con-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sidered, be in the process of becoming a nova. Certainly beyond the horizon there was even more terrible heat than had struck the human colony before sundown. Even if the sun did not explode, even if it was only as fiercely blazing as at its setting, they would die within hours after sunrise. If it increased in brightness, by daybreak its first rays would be death itself. When dawn came, the very first direct beams would set the shiver trees alight on the hilltops, and as it rose the fires would go down into the valleys. This house would smoke and writhe and melt; the air would become flame, and the planet's surface would glow red-hot as it turned into the sunshine.

"IT'S going to be—all right, Lon," Cathy said unconvincedly. "It's just something happening that'll be over in a little while. But—in case it isn't—we might as well be together. Don't you think so?"

Lon put his arm comfortingly around her. He felt a very strong impulse to lie. He could pretend to vast wisdom and tell her the sun's behavior was this or that, and never lasted more than a few hours, but she'd know he lied. They could spend their last hours trying to deceive each other out of pure affection. But they'd know it was deceit.

"D-don't you think so?" insisted Cathy faintly.

He said gently, "No, Cathy, and neither do you. This is the finish. It would've been a lot nicer to go on living, the two of us. We'd have had long, long years to be together. We'd have had kids, and they'd have grown up, and we'd have had—a lot of things. But now I'm afraid we won't."

He tried to smile at her, but it hurt. He thought passionately that he would gladly submit himself to be burned in the slowest and most excruciating manner if only she could be saved from it. But he couldn't do anything.

Cathy gulped. "I—I'm afraid so, too, Lon," she said in a small voice. "But it's nice we met each other, anyhow. Now we know we love each other. I don't like the idea of dying, but I'm glad we knew we loved each other before it happened."

Lon's hands clenched fiercely. Then the rage went away. He said almost humorously, "Carson—he's back in Cetopolis. I wonder how he feels. He has no better chance than anybody else. Maybe he's sent off spacegrams, but no ship could possibly get here in time."

Cathy shivered a little. "Let's not think about him. Just about us. We haven't much time."

And just then, very strangely,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

an idea came to Lon Simpson. He tensed.

After a moment, he said in a very queer voice, "This isn't a nova. It's a flare-up. The sun isn't exploding. It's just too hot, too big for the temperature inside it, and it's a closed system. So radiation pressure has been building up. Now it's got to be released. So it will spout geysers of its own substance. They'll go out over hundreds of thousands of miles. But in a couple of weeks it will be back—nearly—to normal."

He suddenly knew that. He knew why it was so. He could have explained it completely and precisely. But he didn't know how he knew. The items that added together were themselves so self evident that he didn't even wonder how he knew them. They *had* to be so!

CATHY said muffledly, her face against his shoulder, "But we won't be alive in a couple of weeks, Lon. We can't live long past daybreak."

He did not answer. There were more ideas coming into his mind. He didn't know where they came from. But again they were such self evident, unquestionable facts that he did not wonder about them. He simply paid tense, desperately concentrated attention as they formed themselves.

"We—may live," he said shakily. "There's an ionosphere up at the top of the atmosphere here, just like there is on Earth. It's made by the sunlight ionizing the thin air. The—stronger sunlight will multiply the ionization. There'll be an—actually conducting layer of air . . . Yes . . . The air will become a conductor, up there." He wet his lips. "If I make a—gadget to—short-circuit that conducting layer to the ground here . . . When radiation photons penetrate a transparent conductor—but there aren't any transparent conductors—the photons will—follow the three-finger rule . . .

"They'll move at right angles to their former course—"

He swallowed. Then he got up very quietly. He put her aside. He went to his tool shed. He climbed to the roof of the barn now filled with *thanar* leaves. He swung his axe.

The barn was roofed with aluminum over malleable plastic. The useful property of malleable plastic is that it does not yield to steady pressure, but does yield to shock. It will stay in shape indefinitely under a load, but one can tap it easily into any form one desires.

Lon swung his axe, head down. Presently he asked Cathy to climb up a ladder and hold a lantern for him. He didn't need

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

light for the rough work—the burning desert vegetation gave enough for that. But when one wants to make a parabolic reflector by tapping with an axe, one needs light for the finer part of the job.

IN Cetopolis, Carson agitatedly put his records on tape and sent it all off by spacegram. He'd previously reported on Lon Simpson, but now he knew that he was going to die. And he followed his instinct to transmit all his quite useless records, in order that his superiors might realize he had been an admirable employee. It did not occur to him that his superiors might be trying frantically to break his sending beam to demand that he find out how Lon Simpson made his power gadget and how he converted vegetation, before it was too late. They didn't succeed in breaking his beam, because Carson kept it busy.

He was true to type.

Elsewhere, other men were true to type, too. The human population of Cetis Gamma Two was very small. There were less than five thousand people on the planet—all within a hundred miles of Cetopolis, and all now on the night side. The rest of the planet's land masses scorched and shriveled and burst into flame where the sun struck them. The few small oceans heated and their surfaces even boiled. But nobody saw it. The local fauna and flora died over the space of continents.

But in the human settlement area, people acted according to their individual natures. Some few ran amok and tried to destroy everything — including themselves—before the blazing sun could return to do it. More sat in stunned silence, waiting for doom. A few dug desperately, trying to excavate caves or pits in which they or their wives or children could be safe . . .

But Lon pounded at his barn roof. He made a roughly parabolic mirror some three yards across. He stripped off aluminum siding and made a connection with the ground. He poured water around that connection. He built a crude multiply twisted device of copper wire and put it in the focus of the parabolic mirror.

He looked up at the sky. The stars seemed dimmer. He took the copper thing away, and they brightened a little. He carefully adjusted it until the stars were at their dimmest.

He descended to the ground again. He felt an odd incredulity about what he'd done. He didn't doubt that it would work. He was simply unable to understand how he'd thought of it.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"THERE, darling! Your pets are quite safe!" Rhadampsicus said pleasedly.

Nodalictha scanned the second planet. It was apparently coated with a metallic covering. But it was not quite like metal. It was misty, like an unsubstantial barrier to light—and to Nodalictha's penetrating thoughts.

"I had your male pet," Rhadampsicus explained tenderly, "set up a power beam link to the ionosphere. With several times the usual degree of ionization—because of the flaring sun—the grounded ionosphere became a *Rhinthak* screen about the planet. The more active the sun, the more dense the screen. They'll have light to see by when their side of the planet is toward the sun, but no harmful radiation can get down to them. And the screen will fade away as the sun goes back to its normal state."

Nodalictha rejoiced. Then she was a little distressed.

"But now I can't watch them!" she pouted. Rhadampsicus watched her gravely. She said ruefully, "I see, Rhadampsicus. You've spoiled me! But if I can't watch them for the time being, I won't have anything to occupy me. Darling Rhadampsicus, you must talk to me sometimes!"

He talked to her absorbedly. He seemed to think, however, that discussion of the local solar phenomena was conversation. With feminine guile, she pretended to be satisfied, but presently she went back to her housekeeping. She began to dream of their life when they had returned home, and of the residence they would inhabit there. Presently she was planning the parties she would give as a young matron, with canapés of krypton snow and zenon ice, with sprinklings of lovely red nickel bromide crystals for a garnish—

THE sun rose again, and they lived. It was as if the sky were covered with a thick cloud bank which absorbed the monstrous radiation of a sun now four times its previous diameter and madly changing shape like a monstrous ameba of flame.

In time the sun set. It rose again. It set. And Cetis Gamma Two remained a living planet instead of being a scorched cinder.

When four days had gone by and nobody died, the colonists decided that they might actually keep on living. They had at first no especially logical foundation for their belief.

But Cathy boasted. And she boasted in Cetopolis. Since they were going to keep on living, the conventions required that she return to the planet's one human settlement and her duties as a beamphone operator. It wasn't

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

proper for her to stay unchaperoned so long as she and Lon weren't married yet.

She had no difficulty with Carson. He didn't refer to her desertion. Carson had his own troubles. Now that he had decided that he would live, his problems multiplied. The colonists' barns were filled to capacity with *thanar* leaves which would pay off their debts to the Company. He began to worry about that.

Lost without the constant directives from the Company, he had his technicians step up the power in the settlement transmitter. He knew that the screen Lon had put up would stop ordinary spacegram transmission. Even with a tight beam, he could broadcast and receive only at night, when the screen was thinnest. Even so, he had to search out holes in the screen.

The system didn't work perfectly—it wasn't two-way at all, until the Company stepped up the power in its own transmitter—but spacegrams started to get through again.

Carson smiled in relief. He began to regain some of his old arrogantly bored manner. Now that the Company's guiding hand was once more with him, nothing seemed as bad as it had been. He was able to report that something had happened to save the colony from extinction, and that Lon Simpson had probably done it.

In return, he got a spacegram demanding full particulars, and precise information on the devices he had reported Lon Simpson to have made.

Humbly, Carson obeyed his corporation.

HE pumped Cathy—which was not difficult, because she was bursting with pride in Lon. She confirmed, in detail, the rumor that Lon was somehow responsible for the protective screen that was keeping everybody alive.

Carson sent the information by spacegram. He was informed that a special Company ship was heading for Cetis Gamma Two at full speed. Carson would take orders from its skipper when it arrived. Meanwhile, he would buy *thanar* leaf if absolutely necessary, but stall as long as possible. The legal staff of the Trading Company was working on the problem of adapting the system to get the new surplus supplies of *thanar* without letting anybody get anything in particular for it. He would keep secret the coming of the special ship, which was actually the space yacht of a member of the Board of Directors. And he would display great friendliness toward Lon Simpson.

The last was the difficult part, because Lon Simpson was becoming difficult. With the sun

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

writhing as if in agony overhead —seen dimly through a permanent blessed mistiness — and changing shape from hour to hour, Lon Simpson had discovered something new to get mad about. Lon had felt definitely on top of the world. He had solved the problem of clearing his debts and getting credit sufficient for two passages back to Earth, with money there to take care of getting rich on his inventions. There was no reason to delay marriage. He wanted to get married. And through a deplorable oversight, there had been no method devised by which a legal marriage ceremony could be performed on Cetis Gamma Two.

It was one of those accidental omissions which would presently be rectified. But the legal minds who'd set up the system for the planet had been thinking of money, not marriages. They hadn't envisioned connubial bliss as a service the Company should provide. And Lon was raising cain. His barn was literally bursting with *thanar* leaves, and he was filling up his attic, extra bedroom, living quarters and kitchen with more. He was rich. He wanted to get married. And it wasn't possible.

Lon was in a position to raise much more cain than ordinary. He'd made an amicable bargain with his fellow colonists. They brought truckloads of miscellaneous foliage to be put into his vegetation converter, and he converted it all into *thanar* leaves. The product was split two ways. Everybody was happy — except Carson—Because every colonist had already acquired enough *thanar* leaf to pay himself out of debt, and was working on extra capital.

If this kept up, the galactic market would be broken.

Carson had nightmares about that.

SO the sun went through convulsions in emptiness, and nobody on its second planet paid any attention at all. After about a week, it occasionally subsided. When that happened, the ionization of the planet's upper atmosphere lessened, the radiation screen grew thinner, and a larger proportion of light reached the surface. When the sun flared higher, the shield automatically grew thicker. An astronomical phenomenon which should have destroyed all life on the inner planets came to be taken for granted.

But events on the second planet were not without consequences elsewhere. The Board of Directors of the Cetis Gamma Trading Company simultaneously jittered and beamed with anticipation. If Lon could convert one form of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

vegetable product into another, then the Company's monopoly of *thanar* would vanish as soon as he got loose with his device. On the other hand, if the Company could get that device for its very own . . .

Thanar had a practically unlimited market. Every year a new age group of the population needed a milligram a day to keep old age away. But besides that, there was Martian *zuss* fiber, which couldn't be marketed because there wasn't enough of it, but would easily fetch a thousand credits a kilo if Lon's gadget could produce it from samples. There was that Arcturian *sicces* dust—the pollen of an inordinately rare plant on Arcturus Four—which could be sold at more than its weight in diamonds, for perfume. And—

The directors of the Company shivered over what might happen; and gloated over what could. So they kept their fingers crossed while the space yacht of one of their number sped toward Cetis Gamma Two, manned by very trustworthy men who would carry out their instructions with care and vigor and no nonsense about it.

Lon Simpson worked with his neighbors, converting all sorts of vegetable debris—the fact that some of it was scorched did not seem to matter—into *thanar* leaf which was sound legal tender on that particular planet. From time to time he went to Cetopolis. He talked sentimentally and yearningly to Cathy. And then he went to Carson's office and raised the very devil because there was as yet no arrangement by which he and Cathy could enter into the state of holy matrimony.

RHADAMPSICUS looked over his notes and was very well pleased. He explained to Nodalictha that from now on the return of Cetis Gamma to its normal condition would be a cut-and-dried affair. He would like to stay and watch it, but the important phenomena were all over now. He said solicitously that if she wanted to go on, completing their nuptial journey . . . She might be anxious to see her family and friends . . . She might be lonely . . .

Nodalictha smiled at him. The process would have been horrifying to a human who watched, but Rhadampsicus smiled back.

"Lonely?" asked Nodalictha coyly. "With you, Rhadampsicus?"

He impulsively twined his eye stalks about hers. A little later he was saying tenderly, "Then I'll just finish my observations, darling, and we'll go on—since you don't mind waiting."

"I'd like to see my pets again,"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

said Nodalictha, nestling comfortably against him.

Together, they scanned the second planet, but their thoughts could not penetrate its *Rhinthak* screen. They saw the space yacht flash up to it. Rhadampsicus inspected the minds of the bipeds inside it. Nodalictha, of course, modestly refrained from entering the minds of male creatures other than her husband.

"Peculiar," commented Rhadampsicus. "Very peculiar. If I were a sociologist, I might find it less baffling. But they must have a very queer sort of social system. They actually intend to harm your pets, Nodalictha, because the male now knows how to supply them all with food and energy! Isn't that strange? I wish the *Rhinthak* screen did not block off scanning . . . But it will fade, presently."

"You will keep the others from harming my pets," said Nodalictha confidently. "Do you know, darling, I think I must be quite the luckiest person in the Galaxy, to be married to you."

THE space yacht landed at the field outside Cetopolis. Inhabitants of the tiny town flocked to the field to see new faces. They were disappointed. One man came out and the airlock closed. No visitors.

The skipper went into Carson's office. He closed the door firmly behind him. He had very beady eyes and a very hard-boiled expression. He looked at Carson with open contempt, and Carson felt that it was because Carson did the Company's dirty work with figures and due regard for law and order, instead of frankly and violently and without shilly-shallying.

"This Lon Simpson's got those gadgets, eh?" asked the skipper.

"Why—yes," said Carson unhappily. "He's very popular at the moment. He made something on his barn roof that kept the sun from burning us all to death, you know—that still keeps us from burning to death, for that matter."

"So if we take it away or smash it," observed the skipper, "we don't have to worry about anybody saying nasty things about us afterward. Yeah?"

Carson swallowed:

"Everybody'd die if you smashed the gadget," he admitted, "but all the *thanar* plants in existence would be burned up, too. There'd be no more *thanar*. The Company wouldn't like that."

The skipper waved his hand. "How do I get this Simpson on my ship? Take a bunch of my men and go grab him?"

"Wh-what are you going to do with him?"

"Don't you worry," said the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

skipper comfortingly. "We know how to handle it. He knows how to make some things the bosses want to know how to make. Once I get him on the ship, he'll tell. We got ways. Do I take some men and grab him, or will you get him on board peaceable?"

"There—ah—" Carson licked his lips. "He wants to get married. There's no provision in the legal code for it, as yet. It was overlooked. But I can tell him that as a ship captain, you—"

The skipper nodded matter of factly.

"Right. You get him and the girl on board. And I've got some orders for you. Gather up plenty of *thanar* seed. Get some starting trays with young plants in them. I'll come back in a couple of days and take you and them on board. The stuff this guy has got is too good, understand?"

"N-no. I'm afraid I don't."

"I GET this guy to tell us how to make his gadgets," the skipper explained contemptuously. "We make sure he tells us right. To be extra sure, we leave the gadgets he's got made and working back here, where he can't get to 'em and spoil 'em. But when we know all he knows—and what he only guesses, too, and my tame scientists have made the same kinda gadgets, an' they work—why, we come back and pick you up, and the *thanar* seed and the young growing plants. Then we get the gadgets this guy made here, and we head back for Earth."

"But if you take the gadget that keeps us all from being burned up—" Carson said agitatedly, "if you do, everybody here—"

"Won't that be too bad!" the skipper said ironically. "But you won't be here. You'll be on the yacht. Don't worry. Now go fix it for the girl and him to walk into our parlor."

Carson's hand shook as he reached for the beamphone. His voice was not quite normal as he explained to Cathy in the exchange that the skipper of the space yacht had the legal power to perform marriage ceremonies in space. And Carson, as a gesture of friendship to one of the most prominent colonists, had asked if the captain would oblige Cathy and Lon. The captain had agreed. If they made haste, he would take them out in space and marry them.

The skipper of the space yacht regarded him with undisguised scorn when he hung up the phone and mopped his face.

"Pretty girl, eh?" he asked contemptuously, "and you didn't have the nerve to grab her for yourself?" He did not wait for an answer. "I'll look her over.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

You get your stuff ready for when I come back in a couple of days."

"But—when you release them," Carson said shakily, "They'll report—"

The skipper looked at Carson without any expression at all. Then he went out.

Carson felt sick. But he was a very loyal employee of the Cetis Gamma Trading Company. From the windows of his air-conditioned office, he watched Lon Simpson greet Cathy on his arrival in Cetopolis. He saw Cathy put a sprig of *chanel* blossoms on the lapel of her very best suit, in lieu of a bridal bouquet. And he watched them go with shining faces toward the airport. He didn't try to stop them.

Later he heard the space yacht take off.

NODALICTHA prepared to share the thoughts and the happiness of the female biped whose emotions were familiar, since Nodalictha was so recently a bride herself. Rhadampsicus was making notes, but he gallantly ceased when Nodalictha called to him. They sat, then, before their crude but comfortable bower on the ninth planet, all set to share the quaint rejoicing of the creatures of which Nodalictha had grown fond.

Nodalictha penetrated the thoughts of the female, in pleased anticipation. Rhadampsicus scanned the mind of the male, and his expression changed. He shifted his thought to another and another of the bipeds in the ship's company. He spoke with some distaste.

"The ones you consider your pets, Nodalictha, are amiable enough. But the others—" He frowned. "Really, darling, if you went into their minds, you'd be most displeased. They are quite repulsive. Let's forget about them and start for home. If you really care for pets, we've much more suitable creatures there."

Nodalictha pouted.

"Rhadampsicus, let's just watch their marriage ceremony. It is so cute to think of little creatures like that loving each other —and marrying—"

Rhadampsicus withdrew his thought from the space yacht and looked about the charming rural retreat he and Nodalictha had occupied. Its nitrogen-snow walls glittered in the starlight. The garden of cyanogen flowers and the border of ammonia crystals and the walkway of monoclinic sulphur, and the reflection pool of liquid hydrogen he'd installed in an odd half hour. These were simple, but they were delightful. The crudity of the space yacht with its metal walls so curiously covered over with a coating of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

lead oxide in hardened oil, and the vegetable gum flooring . . . Rhadampsicus did not like the surroundings men made for themselves in space.

"Very well, darling," he said resignedly. "We will watch, and then we'll take off for home. I'm anxious to see what the modernists have to say when I show them my notes on this flare-up. —And of course," he added with grave humor, "you want to show your family that I haven't ill-treated you."

He was the barest trace impatient, but Nodalictha's thoughts were with the female biped in the spaceship. Her expression was distressed.

"Rhadampsicus!" she said angrily. "The other bipeds are being unkind to my pets! Do something! I don't like them!"

A SAILOR in a soiled uniform led them into the space yacht's saloon. The airlock clanked shut, and the yacht soared for the skies. The sailor vanished. Nobody else came near. Then Lon stiffened. He got the flavor of his surroundings. He had Cathy with him. On her account, his flesh crawled suddenly.

This was a space yacht, but of a very special kind. It was a pleasure ship. The decorations were subtly disgusting. There were pictures on the walls, and at first glance they were pretty enough, but on second glance they were disquieting, and when carefully examined they were elaborately and allusively monstrous. This was the yacht of someone denying that anything could be more desirable than pleasure—and who took his pleasure in a most unattractive fashion.

Lon grasped this much, and it occurred to him that the crew of such a yacht would be chosen for its willingness to coöperate in its owner's enterprises. And Lon went somewhat pale, for Cathy was with him.

The ship went up and up, with the dark shutters over the ports showing that it was in sunshine fierce enough to be dangerous on unshielded flesh. Presently there was the feel of maneuvering. After a time the shutters flipped open and stars were visible.

Lon went quickly to a port and looked out. The great black mass of the night side of Cetis Gamma Two filled half the firmament. It blotted out the sun. The space yacht might be two or three thousand miles up and in the planet's umbra—its shadow—which was not necessary for a space wedding, or for anything involving a reasonably brief stay in the excessive heat Cetis Gamma gave off.

There were clankings. A door

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

opened. The skipper came in and Cathy smiled at him because she didn't realize Lon's fierce apprehension. Four other men followed, all in soiled and untidy space yacht uniforms, then two other men in more ordinary clothing. Their expressions were distinctly uneasy.

The four sailors walked matter of factly over to Lon and grabbed at him. They should have taken him completely by surprise, but he had been warned just enough to explode into battle. It was a very pretty fight, for a time. Lon kept three of them busy. One snarled with a wrenched wrist, another spat blood and teeth and a third had a closed eye before the fourth swung a chair. Then Lon hit something with his head. It was the deck, but he didn't know it.

WHEN he came to, he was hobbled. He was not bound so he couldn't move, but his hands were handcuffed together, with six inches of chain between for play. His ankles were similarly restricted. He could move, but he could not fight. Blood was trickling down his temple and somebody was holding his head up.

The skipper said impatiently, "All right, stand back."

Lon's head was released. The skipper jerked a thumb. Men went out. Lon looked about desperately for Cathy. She was there —dead white and terrified, but apparently unharmed. She stared at Lon in wordless pleading.

"You're a suspicious guy, aren't you?" asked the skipper sardonically. "Somebody lays a finger on you and you start fighting. But you've got the idea. I'll say it plain so we can get moving. You're Lon Simpson. Carson, down on the planet, reported some nice news about you. You made a gadget that converts any sort of leaf to *thanar*. Maybe it turns stuff to other stuff, too." He paused. "We want to know how to make gadgets like that. You're gonna draw plans an' explain the theory. I got guys here to listen. We're gonna make one, from your plans an' explanations, an' it'd better work. See?"

"Carson sent for you to do this," Lon Simpson said thickly.

"He did. The Company wants it. They'll use it to make *zuss* fiber and *sicces* dust, and stuff like that. Maybe dream dust, too, an' so on. The point is you're gonna tell us how to make those gadgets. How about it?"

Lon licked his lips. He said slowly, "I think there's more. Go on."

"You made another gadget," said the skipper, with relish, "that turns out power without fuel. The Company wants that,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

too. Spacelines will pay for it. Cities will pay for it. It ought to be a pretty nice thing. You're gonna make plans and explanations of how that works and we're gonna make sure they're right. That clear?"

"Will you let us go when I've told you?" Lon asked bitterly.

"Not without one more gadget," the skipper added amiably. "You made something that put a screen around the planet yonder, so it didn't get burned up. It'd oughta be useful. The company 'll put one around Mercury. Convenient for minin' operations. One around that planet that's too close to Sirius. Oh, there's plenty of places that'll be useful. So you'll get set to draw up the plans for that, too—*and* explanations of how it works. Then we'll talk about lettin' you go."

LON knew that he wouldn't be let go in any case. Not after he'd told them what was wanted. Not by men who'd work on a pleasure craft like this. Not with Cathy a prisoner with him. But he might as well get all the cards down.

"And if I won't tell you what you want to know?" he asked.

The skipper shrugged his shoulders. "You were knocked out a while," he said without heat. "While we were waitin' for you to come to, we told her—" he jerked his thumb at Cathy—"what would happen to her if you weren't obligin'. We told her plenty. She knows we mean it. We won't hurt you until we've finished with her. So you'd better get set to talk. I'll let her see if she can persuade you peaceable. I'll give her ten minutes."

He went out. The door clicked shut behind him and Lon knew that this was the finish. He looked at Cathy's dazed, horror-filled eyes. He knew this wasn't a bluff. He was up against the same system that had brought colonists to Cetis Gamma Two. The brains that had planned that system had planned this. They'd gotten completely qualified men to do their dirty work in both cases.

"Lon, darling! Please kill me!" Cathy said in a hoarse whisper.

He looked at her in astonishment.

"Please kill me!" repeated Cathy desperately. "They—they can't ever dare let us go, Lon, after what they've told me! They've got to kill us both. But —Lon, darling — please kill me first . . ."

An idea came into Lon's mind. He surveyed it worriedly. He knew that he would have to tell what he knew and then he would be killed. The Cetis Gamma Trading Company wanted his inventions, and it would need him dead after it had them.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The idea was hopeless, but he had to try it. They knew he'd made gadgets which did remarkable things. If he made something now and persuaded them that it was a weapon . . .

His flesh crawled with horror. Not for himself, but for Cathy. He fumbled in his pockets. A pocket knife. A key chain. String. His face was completely gray. He ripped an upholstered seat. There were coiled springs under the foamite. He pulled away a piece of decorative molding. He knew it wouldn't work, but there wasn't anything else to do. His hands moved awkwardly, with the handcuffs limiting their movements.

Time passed. He had something finished. It was a bit of wood with a coil spring from the chair, with his key chain wrapped around it and his pocket knife set in it so that the blade would seem to make a contact. But it would achieve nothing whatever.

Cathy stared at him. Her eyes were desperate, but she believed. She'd seen three equally improbable devices perform wonders. While Lon made something that looked like the nightmare of an ultimatist sculptor, she watched in terrified hope.

HE HAD it in his hand when the door opened again and the skipper came back into the saloon. He said prosaically, "Shall I call in the scientist guys to listen, or the persuader guys to work on her?"

"Neither. I've made another gadget," Lon said from a dry throat. "It will kill you. It'll kill everybody on the ship — from here. You're going to put us back down on the planet below."

The skipper did not look at the gadget, but at Lon's face. Then he called. The four men of the crew and the two uneasy scientists came in.

"We got to persuade," the skipper said sardonically. "He just told me he's made a new gadget that'll kill us all."

He moved unhurriedly toward Lon. Lon knew that his bluff was no good. If the thing had actually been a weapon, he'd have been confident and assured. He didn't feel that way, but he raised the thing menacingly as the skipper approached.

The skipper took it away, laughing.

"We'll tie him in a chair an' get to work on her. When he's ready to talk, we'll stop." He looked at the object in his hands. It was ridiculous to look at. It was as absurd as the device that extracted power from matter stresses, and the machine that converted one kind of vegetation into another, and the apparatus—partly barn roof—that had short-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cuited the ionosphere of Cetis Gamma Two to the planet's solid surface. It looked very foolish indeed.

The skipper was amused.

"Look out, you fellas," he said humorously. "It's gonna kill you!"

He crooked his finger and the knifeblade made a contact. He swept it in mock menace about the saloon. The four crew-members and the two scientists went stiff. He gaped at them, then turned the device to stare at it incredulously. He came within its range.

He stiffened. Off-balance, he fell on the device, breaking its gimcrack fastenings and the contact which transmitted nothing that Lon Simpson could imagine coming out of it. The others fell, one by one, with peculiarly solid impacts.

Their flesh was incredibly hard. It was as solid, in fact, as so much mahogany.

NODALICTHA said warmly, "You're a darling, Rhadampsicus! It was outrageous of those nasty creatures to intend to harm my pets! I'm glad you attended to them!"

"And I'm glad you're pleased, my dear," Rhadampsicus said pleasantly. "Now shall we set out for home?"

Nodalictha looked about the cosy landscape of the ninth planet of Cetis Gamma. There were jagged peaks of frozen air, and mountain ranges of water, solidified ten thousand aeons ago. There were frost-trees of nitrogen, the elaborate crystal formations of argon, and here a wide sweep of oxygen crystal sward, with tiny peeping wild crystals of deep-blue cyanogen seeming to grow more thickly by the brook of liquid hydrogen. And there was their bower; primitive, but the scene of a true honeymoon idyll.

"I almost hate to go home, Rhadampsicus," Nodalictha said. "We've been so happy here. Will you remember it for always?"

"Naturally," said Rhadampsicus. "I'm glad you've been happy."

Nodalictha snuggled up to him and twined eye stalks with him.

"Darling," she said softly, "you've been wonderful, and I've been spoiled, and you've let me be. But I'm going to be a very dutiful wife from now on, Rhadampsicus. Only it has been fun, having you be so nice to me!"

"It's been fun for me, too," replied Rhadampsicus gallantly.

Nodalictha took a last glance around, and each of her sixteen eyes glowed sentimentally. Then she scanned the far-distant spaceship in the shadow of the second planet from the now subsiding sun.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"My pets," she said tenderly. "But—Rhadampsicus, what are they doing?"

"They've discovered that the crew of their vehicle—they call it a space yacht—aren't dead, that they're only in suspended animation. And they've decided in some uneasiness that they'd better take them back to Earth to be revived."

"How nice! I knew they were sweet little creatures!"

Rhadampsicus hesitated a moment.

"From the male's mind I gather something else. Since the crew of this space yacht was incapacitated, and they were—ah—not employed on it, he and your female will bring it safely to port, and, I gather that they have a claim to great reward. Ah—it is something they call 'salvage.' He plans to use it to secure other rewards he calls 'patents' and they expect to live happily ever after."

"And," cried Nodalictha gleefully, "from the female's mind I know that she is very proud of him, because she doesn't know that you designed all the instruments he made, darling. She's speaking to him now, telling him she loves him very dearly."

Then Nodalictha blushed a little, because in a faraway space yacht Cathy had kissed Lon Simpson. The process seemed highly indecorous to Nodalictha, so recently a bride.

"Yes," said Rhadampsicus, drily. "He is returning the compliment. It is quaint to think of such small creatures— Ha! Nodalictha, you should be pleased again. He is telling her that they will be married when they reach Earth, and that she shall have a white dress and a veil and a train. But I am afraid we cannot follow to witness the ceremony."

Their tentacles linked and their positron blasts mingling, the two of them soared up from the surface of the ninth planet of Cetis Gamma. They swept away, headed for their home at the extreme outer tip of the most far-flung arm of the spiral outposts of the Galaxy.

"But still," said Nodalictha, as they swept through emptiness at a speed unimaginable to humans, "they're wonderfully cute."

"Yes, darling," Rhadampsicus agreed, unwilling to start an argument so soon after the wedding. "But not as cute as you."

ON THE space yacht, Lon Simpson tried to use his genius to invent a way to get his handcuffs and leg-irons off. He failed completely.

Cathy had to get the keys out of the skipper's pocket and unlock them for him.

—MURRAY LEINSTER

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Galaxy SCIENCE FICTION PROUDLY PRESENTS

Beyond

FANTASTIC FICTION

A STARTLING NEW MAGAZINE

Designed, edited and produced by the Galaxy staff.

BEYOND will feature pure fantasy exclusively.

CHARTER SUBSCRIBERS OFFER

A full color print of the cover reproduced especially for framing

+

The valuable first issue permanized with a plastic coating to preserve it

+

6 Issues for $1.50

This offer is limited and expires on date of publication, May 1, 1953, so rush the coupon below.

BEYOND FANTASTIC FICTION ○ **421 Hudson St.** ○ **New York 14, N. Y.**

Reserve my color print plus permanized first issue of your Magazine and send the 6 issues to me at address below. I enclose $1.50. Foreign — $2.50.

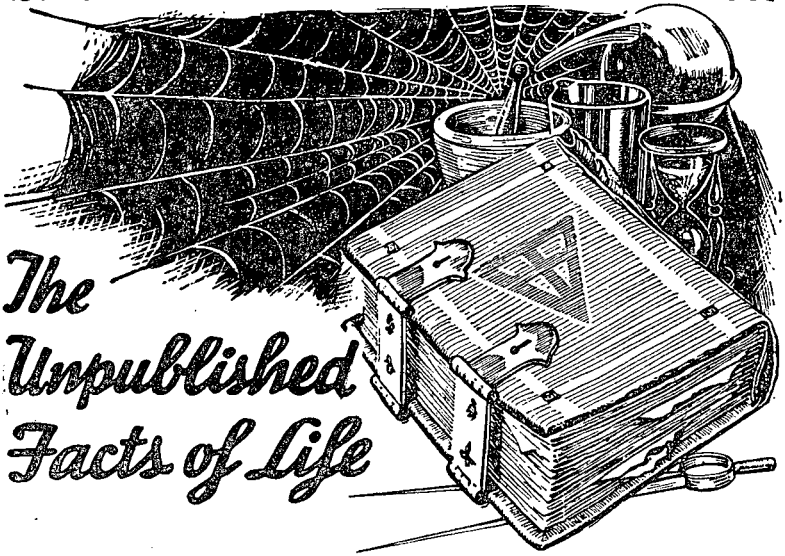
Name .....

Address .....

City ..... Zone ..... State .....

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SECRETS ENTRUSTED TO A FEW



The Unpublished Facts of Life

THERE ARE some things that can not be generally told—*things you ought to know.* Great truths are dangerous to some—but factors for *personal power* and *accomplishment* in the hands of those who understand them. Behind the tales of the miracles and mysteries of the ancients, lie centuries of their secret probing into nature's laws—their amazing discoveries of *the hidden processes of man's mind,* and *the mastery of life's problems.* Once shrouded in mystery to avoid their destruction by mass fear and ignorance, these facts remain a useful heritage for the thousands of men and women who privately use them in their homes today.

THIS FREE BOOK

The Rosicrucians (not a religious organization), an age-old brotherhood of learning, have preserved this secret wisdom in their archives for centuries. *They now invite you to share the practical helpfulness of their teachings.* Write today for a free copy of the book, "The Mastery of Life." Within its pages may lie a new life of opportunity for you. Address: Scribe P.V.B.

The ROSICRUCIANS

(AMORC) • SAN JOSE • CALIFORNIA • U.S.A.

Scribe: P.V.B., The Rosicrucians (AMORC)
San Jose, California, U. S. A.

Please send copy of sealed booklet, "The Mastery of Life," which I shall read as directed.

Name _____

Address _____

City _____

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

They claim this coupon brings you "good luck"

"Six months after mailing the coupon, I had a promotion and a big raise in pay!"

"From the moment I marked the coupon, my luck changed!"

"My break came when I sent the coupon!"

These statements are typical! I.C.S. gets letters like these regularly. Coupon senders report pay raises. Others win important promotions or new, interesting assignments. Still others find happiness, job security, opportunities never dreamed possible.

Is it LUCK? The results are so impressive, so quick in coming, that some say the I.C.S. coupon is "lucky." Of course, that's not true. The real reason for these amazing results is what happens to the person when he or she mails the coupon.

Coupon is first step! Naturally, you want to make good. But you've put off doing something about it. Mailing this coupon is *definite action!* It shows you're fed up with waiting for the breaks. You're determined to make your own breaks! And this determination alone accounts for much of the "luck" you'll start to experience.

You get free guidance! Within a few days you get the helpful and inspiring 36-page book, "How to Succeed." It's crammed with information. For example, it tells you in detail how to plan your career. Also how to prepare for advancement. In addition, you get a free catalog on the I.C.S. course that interests you. With your new-found determination and these two books as your guides, you're ready to cash in on your hidden abilities!

391 I.C.S. courses! You'll find a partial list of courses in the coupon below. Each course is up-to-date, extremely practical, completely success-tested. You study in your spare time. Set your own pace. Correspond directly with instructors. Cost is low. Diplomas are awarded to graduates. I.C.S. training rates high in all fields of business and industry. You won't find another school like it.

Call it being "lucky" or being "smart." Whatever it is, you're one step closer to your goal when you mail this famous coupon!

INTERNATIONAL CORRESPONDENCE SCHOOLS

ICS

BOX 2254, SCRANTON 9, PENNA.

Without cost or obligation, send me "HOW to SUCCEED" and the booklet about the course BEFORE which I have marked X:

ART
- ☐ Commercial Art
- ☐ Magazine and Book Illustrating
- ☐ Cartooning
- ☐ Show Card and Sign Lettering
- ☐ Fashion Illustrating

AUTOMOTIVE
- ☐ Automobile, Mechanic
- ☐ Auto-Elec. Technician
- ☐ Auto Body Rebuilding and Refinishing
- ☐ Diesel—Gas Engines

AVIATION
- ☐ Aeronautical Engineering Jr.
- ☐ Aircraft Engine Mechanic
- ☐ Airplane Drafting

BUILDING
- ☐ Architecture
- ☐ Arch. Drafting
- ☐ Building Contractor
- ☐ Estimating
- ☐ Carpenter and Mill Work
- ☐ Carpenter Foreman
- ☐ Reading Blueprints
- ☐ House Planning
- ☐ *Plumbing*
- ☐ Heating
- ☐ Steam Fitting
- ☐ Air Conditioning
- ☐ Electrician

BUSINESS
- ☐ Business Administration
- ☐ Certified Public Accountant
- ☐ Accounting
- ☐ Bookkeeping
- ☐ Stenography and Typing
- ☐ Secretarial
- ☐ Federal Tax
- ☐ Business Correspondence
- ☐ Personnel and Labor Relations
- ☐ Advertising
- ☐ Retail Business Management
- ☐ Managing Small Business
- ☐ Sales Management
- ☐ Salesmanship
- ☐ Traffic Management

CHEMISTRY
- ☐ Chemical Engineering
- ☐ Chemistry
- ☐ Analytical Chemistry
- ☐ Petroleum—Nat'l Gas
- ☐ Pulp and Paper Making
- ☐ *Plastics*

CIVIL, STRUCTURAL ENGINEERING
- ☐ Civil Engineering
- ☐ Structural Engineering
- ☐ Surveying and Mapping
- ☐ Structural Drafting
- ☐ Highway Engineering
- ☐ Reading Blueprints
- ☐ Concrete Construction
- ☐ Sanitary Engineering

DRAFTING
- ☐ Aircraft Drafting
- ☐ Architectural Drafting
- ☐ Electrical Drafting
- ☐ Mechanical Drafting
- ☐ Structural Drafting
- ☐ Sheet Metal Drafting
- ☐ Mine Surveying and Drafting

ELECTRICAL
- ☐ Electrical Engineering
- ☐ Electrician
- ☐ Electrical Maintenance
- ☐ Electrical Drafting
- ☐ Electric Power and Light
- ☐ Lineman

HIGH SCHOOL
- ☐ *High School Subjects*
- ☐ College Preparatory
- ☐ Mathematics
- ☐ Commercial
- ☐ Good English

MECHANICAL AND SHOP
- ☐ Mechanical Engineering
- ☐ Industrial Engineering
- ☐ Industrial Supervision
- ☐ Foremanship
- ☐ Mechanical Drafting
- ☐ Machine Design-Drafting
- ☐ Machine Shop Practice
- ☐ Tool Design
- ☐ Industrial Instrumentation
- ☐ Machine Shop Inspection
- ☐ Reading Blueprints
- ☐ Toolmaking
- ☐ Gas—Electric Welding
- ☐ Heat Treatment—Metallurgy
- ☐ Sheet Metal Work
- ☐ Sheet Metal Pattern Drafting
- ☐ Refrigeration

POWER
- ☐ Combustion Engineering
- ☐ Diesel—Electric
- ☐ *Electric Light and Power*
- ☐ Stationary Steam Engineering
- ☐ Stationary Fireman

RADIO, TELEVISION, COMMUNICATIONS
- ☐ General Radio
- ☐ Radio Operation
- ☐ Radio Servicing—FM
- ☐ Television
- ☐ Electronics
- ☐ Telephone Work

RAILROAD
- ☐ Locomotive Engineer
- ☐ Diesel Locomotive
- ☐ Air Brakes ☐ Car Inspector
- ☐ Railroad Administration

TEXTILE
- ☐ Textile Engineering
- ☐ Cotton Manufacture
- ☐ Rayon Manufacture
- ☐ Woolen Manufacture
- ☐ Loom Fixing
- ☐ Finishing and Dyeing
- ☐ Textile Designing

HOME ARTS
- ☐ Dressmaking and Designing
- ☐ Cookery
- ☐ *Tea Room Management*

Name _____ Age _____ Home Address _____

City _____ State _____ Working Hours _____ A.M. to _____ P.M.

Present Position _____

Special tuition rates to members of the Armed Forces. Canadian residents send coupon to International Correspondence Schools Canadian, Ltd., Montreal, Canada

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED